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ART. I.—*A Dissertation on the Mysteries of the Cabiri; or the great Gods of Phenicia, Samothrace, Egypt, Troas, Greece, Italy, and Crete; being an Attempt to deduce the several Orgies of Isis, Ceres, Mithras, Bacchus, Rhea, Adonis, and Hecate, from an Union of the Rites commemorative of the Deluge with the Adoration of the Host of Heaven. By George Stanley Faber, A.M., &c. 2 Vols. 8vo. 16s. Boards. Rivingtons. 1803.*

IN the Evangelical Preparation of Eusebius, occurs a fragment of allegorical or mythological cosmogony, said to be translated by the Philo who flourished under Hadrian, from the Phœnician language; though more probably, as Dodwell thinks, forged by this very Philo. The Phœnician author's name is stated to have been Sanchoniatho, who is asserted to have borrowed his information from Taautus, an Egyptian: but, of the age in which these two individuals flourished, nothing can be conjectured with confidence.

Their cosmogony describes the universe as beginning in a misty chaos. This separates into mucilage and æther. Next arise the *Zophiesemin*, or spies of heaven—the stars, moon, sun, animals having no sense, and formed alike in the shape of an egg.

Next arise meteors, thunder, and lightning, which frighten the torpid animals into motion and intelligence; and male and female stir in the earth and in the sea.

Next arise the winds; and of the wind Colpias, and his wife Baau, were begotten two mortals, Protogonus and Æon, of whom the latter found out the way of taking food from trees.

From these proceeded Genus and Genea, who dwelled in Phœnicia, where they founded the worship of the Sun, under the name *Beelsamin*, or Lord of Heaven. The sons of Genus and Genea were called Cassius, Libanus, Antilibanus, and Brathys, from whom the mountains had their name.

Of these were begotten Memrumus, and the Hypsuranius who invented thatching, and founded Tyre. He fell into enmity with his brother Usous, who invented a clothing of hides, and the raft.

From Hypsuranius, descended Agreus and Halieus, the inventors of hunting and fishing; and, from them, Chrysor, the inventor of the forge; Agrus, who invented the plough, and whose temple was carried about by an ox; Amynus, Magus, and other Titans.

These men begot Misor and Sydyk, who found out the use of salt.

From Misor came Taautus, the inventor of writing. But from Sydyk the Cabiri, or Dioscuri, or Corybantes, or Samothraces, who first built a complete ship.

To the illustration of the mysteries of these Cabiri, has been consecrated the Dissertation, in two octavo volumes, now before us.

It is evident, from the slightest inspection of this cosmogony, that the names are almost all descriptive, or allegorical: Protogonus signifies *first-born*; Æon, *time or age*; Agreus, *hunter*; Halieus, *fisher*; and so on. They are consequently subsequent to the inventions indicated; and cannot be received as historical testimony. Some of the names, such as Antilibanus, are not likely to have had a parallel in the Phœnician tongue; so that they can hardly have been fixed on before the diffusion of the Greek language in Phœnicia; that is, not before the Macedonian conquest. To build any thing like historical inference on such data, would be the inversion of common sense and common probability. The whole account, at most, deserved that sort of commentary which the introductory saga of Sæmund's Edda might claim. An attempt to elucidate the manner in which rude and ignorant tribes account to themselves for the origin of things would, perhaps, be rendered more instructive by the comparison of this document with others of a similar kind. It happens, however, that a bishop of the church of England (by name Cumberland) imagined this mythological extravagance to contain corroborations of the Mosaic history. The author of the *Remains of Japhet*, more recently Mr. Bryant, major Vallancey, governor Pownall, &c. and at length the writer before us, have prosecuted, with analogous insagacity, and rasher pedantry, a similar line of research. They would have us believe, that, if names can be minced into Hebrew syllables, and these syllables rendered plausibly descriptive of any biblical hero, that hero must be designated by such names. Thus *Nuctimus* (p. 25) is resolved into *Nuch-Tam*, and supposed to signify *Noah*, the perfect man. *Sydyk* resembles *Sadik*, which means *just*: consequently, says bishop Cumberland, Sydyk must be Shem, who was a just man: consequently, says our author (p. 55), Sydyk must be Noah, who is called so (Genesis, vi, 9) by Moses. After the ridicule cast, in the *Vicar of Wakefield*, on Sanchoniatho's cosmogony, it is surprising that any one

should venture on a new commentary: but it seems as if the whole gross of green spectacles were yet to find noses.

The very system of identifying the heroes of different regions is founded in the perversion of probability. In all idolatrous countries, some divinities have been emblematic, as the god of thunder, the god of the sea, the goddess of love: does it follow that the worshippers of Thor must have borrowed their rites from those of Jupiter, of Niord from Poseidon, or of Frea from Aphrodite? Other divinities have been the illustrious dead, as Hercules, Bacchus, Osiris. It is, in this case, absolutely impossible that the same man should distinguish himself everywhere by useful feats of strength, should everywhere introduce the vine, or everywhere teach brewing. Hercules was admired in Bœotia, Samson in Palestine, Starkader in Scandinavia: but even if their names all signified, like the last, *strong-vein*, it would be preposterous to suppose them the same person. Noah first planted the vine on mount Ararat: therefore he is not the same person as Bacchus, who began its culture on mount Meros. Osiris taught brewing to the Egyptians; therefore he is not the same person as Julian, who is surmised to have introduced it at Paris. The *just man* of Phœnician tradition will and must differ from the Solomon of Jerusalem, or the Aristides of Athens. The chance must always be, that emblematic divinities, whose popularity is found to vary with the local interests of nations, are autochthonous, and have grown out of the wishes and wants of their votaries: accordingly, they are everywhere personified with peculiar emblems: among the Hindus, the bird of love is a parrot; among the Greeks, a dove. The chance, too, must always be that defunct divinities reigned or flourished in the country where they are venerated; as the celebrity of a hero, in early times, seldom overstepped the precincts of a language, or the sphere of his efficiency.

The reader may form an adequate idea of our author's style of commentary, from the following passage: it recalls the mystical and aimless erudition of the Alexandrian Platonists.

‘ Having now sufficiently considered the history of Cronus and his children, I shall proceed to investigate that of his collateral relations.

‘ As for Betylus, who is said by Sanchoniatho to be the brother of Cronus, he is certainly a mere allegorical personification. The word is precisely the same as the Hebrew Beth-El, *the house of God*; and it alludes to the altar erected by Noah, for the purpose of sacrificing to the Lord of heaven and earth, after his miraculous escape from the perils of the deluge. If we turn to the page of Scripture, we shall find that *Beth-El* is the usual patriarchal name for sacred structures of this nature.

“ And Jacob rose up early in the morning, and took the stone that he had put for his pillows, and set it up for a pillar, and poured oil

upon the top of it. And he called the name of that place *Beth-El*; but the name of that city was called *Luz* at the first. And Jacob vowed a vow, saying, If God will be with me, and will keep me in this way that I go, and will give me bread to eat, and raiment to put on; so that I come again to my father's house in peace: then shall the Lord be my God: and *this stone, which I have set for a pillar, shall be God's house.*"

With a similar allusion, no doubt, to the scriptural *Beth-El*, Sanchoniatho mentions, that Uranus, or heaven, contrived stones called *Betulia*, which possessed the power of motion, as if they were instinct with life. These were, in all probability, sacred rocking stones; numbers of which, erected by the Druids, are to be found in various parts of our own island.

Betylus then, the imaginary brother of Cronus, seems to be a mere personification of the patriarchal mode of worship; and is therefore a character of very different nature from the two remaining sons of Uranus, whom Sanchoniatho denominates *Atlas* and *Dagon*. These, no less than Cronus, Demaroon, Agræus, and Sydyk, I take to be severally the patriarch Noah; who was celebrated by the ancient heathens under a great variety of names, allusive to various parts of his history. The astronomical solar superstition, as I have already observed, was very soon ingrafted upon the commemorative rites of the ark: hence Atlas is described, as supporting the heavens upon his shoulders: a circumstance, which, when stripped of its poetical dress, points out to us the attention paid by the early postdiluvians to the motions of the heavenly bodies. Thus, we are informed by Heraclitus, that Atlas was the first astronomer, and that the fiction of his sustaining the heavens arose from his predicting the rising and setting of the stars.

The genealogy of Atlas is variously detailed by the Greeks. The scholiast upon Aratus assigns to him two brothers, Prometheus and Epimetheus; and makes him the son of Uranus by Clymenè daughter of Oceanus; Apollodorus represents him, as the offspring of Iapetus and Asia, another of the daughters of Oceanus; and Proclus describes him, and his two brothers, as the children of Iapetus, either by Asopè, or Clymenè, or Themis. With regard to Prometheus, and Epimetheus, they each seem to be the same person as Atlas, or the helio-arkite Noah; Prometheus being Phra-Ma-Theus, *the great solar deity*, and Epimetheus, Ippa-Ma-Theus, *the great deity of the ark*: the descent however of Atlas from Iapetus is a precise inversion of his real genealogy; for Iapetus, or Japhet, was the son, not the father, of Noah.

The mother of Atlas, as we have just seen, is sometimes said to be Clymenè, sometimes Themis, sometimes Asopè, and sometimes Asia. Clymenè is a contraction of Cula-Menab, *the noëtic ark*; Themis was one of the seven Titanides; and Asopè appears to have borrowed her name from the worship of As-Op, *the solar serpent*. In a similar manner, both Asia the allegorical parent of Atlas, and Asia the continent, seem alike to have derived their respective appellations from *As, fire*, in allusion to the propensity of the oriental world to bestow idolatrous honours upon the solar Noah. Hence we find, that, in the language of the mysteries, all things were said to have sprung from one fire; by which nothing more was meant, than that Noah, who

was worshipped in conjunction with the sun, was the universal father of mankind.

‘ When the rites of the east were imported into Greece, a strong charge was given, that barbaric names should never be changed: concerning which injunction it is observed by Psellus, that there are sacred names of ineffable import, preserved in the mysteries of every nation, and delivered to them immediately by the gods; a circumstance, which makes it unlawful to translate them into the Greek language. The word *Atlas* I apprehend to be one of these sacred names, being compounded of *At-Al-As*, *the fiery god of heat*, or *the sun*, in the conjunction with which the patriarch Noah was idolatrously revered.

‘ According to Sanchoniatho, the astronomical Atlas was thrown by his brother Cronus into a deep pit. I am much inclined to think, that this wild legend relates only to a mode of contemplating the heavenly bodies, which, we are informed, was usual among the ancient astronomers. They are said to have caused themselves to be let down to the bottom of pits, in order that they might be able to see the stars in the day time; by means of which contrivance, they prevented the picture on the retina of the eye from being confused or disturbed by adventitious rays of light.

‘ As Atlas, considered in one point of view, is the sun, so, if we examine his character in another point, we shall have sufficient reason to conclude, that he is also a diluvian god. Thus, as it appears from the preceding account of his genealogy, he is represented as a descendant of the Ocean; and thus Nonnus bestows upon him the title of *Titanus*, or *diluvian*, from his connexion with the history of the deluge.

Εἰ ποτε Μαιν

Συγγονοῦ Ηλεκτρῶν Τιτηνίου ἡρσιν Ἀτλας.

He is further said to have been the first king of Arcadia, or *the land of the divine ark*; the husband of Pleionê, or Bala-Ionah, *the lordly dove*; and the father of the seven Pleiades, whose history plainly shews them to be the same as the seven Cabirides, or Titanides. At present however I must desist from a more particular analysis of the curious legend of the diluvian Atlas, reserving it for that portion of my work, which treats of the various countries devoted to the Cabiric superstition.’ Vol. i. p. 110.

After such a method of commentary, one is hardly surprised at the extravagant result that Agruerus, Sydyk, Asclepius, Tautus, Cronus, Dagon, Atlas, Demaroon, Melicarthus, and Neptune, some of them real, some of them imaginary, personages, and one of them the author of the cosmogony so often referred to, are, all of them — the patriarch Noah. To this decad in unity, our author is wondrously devoted.

Far be it from us, however, to discredit the study of the early antiquities of western Asia. To the cradle of our race, all the descendant nations will continue to look back with pious curiosity. Its primæval inhabitants, condition, and religion, are topics of great interest, and have been little considered by judicious and unprejudiced inquirers. Concerning an antediluvian

population, the records of nature, and the opinions of philosophy, may be silent: but that, either by the gradual subsidence of the ocean, or by the progressive growth of the mountains, the dry land has been extending, and the primæval islands uniting into continents, would have been inferred from the observations of geography, if it had not been narrated in the history of Noah. In what state this history was communicated to the compiler of the Pentateuch, cannot easily be ascertained: yet it has so many internal marks of veracity, that the most skeptical antiquary could not expect to reduce it to less than an account of some voyage undertaken for purposes of colonisation, with a large supply of domesticated animals on board, prolonged beyond reckoning by storm and rain, and directed by the winds to its unintended termination, at the foot of mount Ararat, then, perhaps, an uninhabited continent, separated from Persia by a sea, which habitually covered, or casually inundated, Mesopotamia. The inference, in such circumstances, would be natural, that the rest of mankind had perished; and the family of Noah may have brought with them, from the highlands of Persia, the art of writing, and the traditions they have preserved.

The worship of fire, whether originally emblematic or idolatrous, whether it was the consequence or the cause of monotheism, appears to have been associated with the worship of the one God among all the Assyrian nations. A shekinah, or holy fire, guided the descendants of Abraham through the wilderness. The five Egyptian cities, mentioned by Isaiah, as having the same God with the Israelites, are described by the heathen writers as worshippers of Phtha, or Hephaistos. Hezekiah is called, by Herodotus, a priest of Vulcan. That Moses incorporated Egyptian rites with the patriarchal theism, is notorious; but his chosen people were in fact a sect of that widely-extended oriental religion, which Zoroaster is thought to have reduced to the form afterwards called Manicheism. These worshippers of the sun, of fire, of light, who finally personified light and darkness, good and evil, by the names Ormuz and Ariman, were enemies to idolatry, zealous iconoclasts, and differed little in their speculative tenets from the Pharisaic sect of the Jews. Noah, it should seem, and not Abraham, must first of all have taught this religion, as it is common to so vast a portion of his earliest descendants.

About the time of Nimrod, a colony of idolaters appears to have intruded into the lands occupied by the descendants of Noah. These idolaters probably came from some part of Hindustan, perhaps Guzurat, and founded Babel. But difference of language occasioned a separation between the indigenous inhabitants and the strangers. These brought a higher degree of civilization, and more of the arts of life, than the family of Noah could retain. His descendants became scattered into wander-

ing shepherds: these new-comers were skilful merchants, whose colonies throve rapidly. Nineveh seems to have branched from Babylon. Ezion-Geber, and even Tyre, were emporial towns of the same mercantile nation. All the Egyptian cities apparently owe their religion and arts to the like source. An idea may be formed of the sort of hostility prevalent between the monotheists and the idolaters, by a perusal of the chronicles of the Jewish kings, who, in early life, commonly inclined to the libertine rites of the idolaters, but were often eventually converted to the moral worship of the only God.

This factious hatred of the monotheists and idolaters was not confined to Palestine; it extended over the whole of Western Asia, and mingled in the politics of the Persian empire. Darius the Mede, the son of Hystaspes, availed himself of the superior influence of the monotheists to establish his power, and authorised an extensive massacre of the idolaters, which is narrated in the book of Esther, and by Herodotus. The court of Persia everywhere patronised the monotheists: the court of Egypt, while independent, had patronised the idolaters.

The hereditary aversion of these sects was not extinguished at the time of Alexander's conquest. It increased under his successors, who favoured the decaying idolatry. It occasioned important rebellions against the heathen sovereigns of Rome: and even after the papists had contrived to amalgamate monotheism with idolatry, the iconoclasts deserted to Mahomet and his naked temples.

Inattentive to the persevering vehemence of enmity which prevailed between the indigenous unitarians and the heathen intruders of Assyria, our author strangely fancies the idolaters to have been worshippers of the progenitors of the unitarian tribes. But, as the favourite learning both of the Babylonian, Egyptian, and Phœnician priesthood—such as their astronomical emblems, their zodiacal signs, their reverence for the lotos, their architectural ornaments, their worship of the lingam, the holiness of oxen, and many other peculiarities—may be distinctly traced to Hindustan, it is more likely that whatever superstitions cannot be accounted for on local motives were imported from the mother-country. Professor Kant observes of the Syriac mysteries, that the words of dismissal are in the language of Tibet: this suffices to indicate the course of their progress.

What is not known of Tyre and Carthage may be inferred from what is known of Alexandria, which grew up out of their declension, which afforded asylum to their emigrants, and which inherited their Mediterranean commerce. The monotheists and idolaters were nearly in equipoise at Alexandria; they were competitors for the magistracy, rivals in consequence: the monotheists seem to have included more of the

middle, the idolaters more of the two extreme classes of society. Both the Phœnicians and Carthaginians traded much in the British Channel: they had emporial sea-ports in Great-Britain and in Brittany. The peculiar character of Armorican civilization probably results from this intercourse; for the Belgic nations contained idolaters worshipping the Phœnician divinities Huzzuz, Ashtoreth, Baal, Tautos, and others; and also monotheists, whose priests were called Druids. Our native traditions ascribe to the subversion of Troy the migration of that foreign colony, which settled in Cornwall, and founded the dynasty that Arthur has illustrated; but its date and its results require that it should be ascribed to the subversion of Carthage.

Our author also inclines to connect the British with the Asiatic antiquities; and, in his second volume, comes to the following remarkable inference:—

‘Merlin in short was the same as the Irish Tailgín St. Patric; in other words, he was Noah,’ (*ah, no!*) ‘or the principal Telchin: whence he was denominated by the ancient Celts *Mer-Lin*, or *the marine god of the lake*. This lake, of which he was the deity, was one of the same nature as that which flowed round the purgatory of St. Patric; as that in the vicinity of the Egyptian Buto; and as that of Cotylé, round which the Pelasgi planted their settlements: while his imaginary mistress, the lady of the lake, was nothing more than the Noëtic Ark, the *Latona* of Delos and Buto, the *Atargatis* or *Derceto* of the lake Bambycè.’ Vol. ii. p. 428.

Our author builds much on the derivation of words; but he is no proficient in etymological studies. A like spelling is but a feeble proof of reciprocal connexion. The English words *mould*, putrescent vegetable substance, and *mould*, the matrix or form in which any thing is cast, although undistinguishable to the eye, come from different roots: the first is a Gothic, and the second a French, term. It is by examining the historical progress of a word, and the meaning of its kindred sounds, that a real relation can alone be satisfactorily established. When etymology is conducted without these attentions—when words are chopped into imaginary parts, and, under the name of radicals, an imaginary meaning is assigned to these various fragments—the pretended discoveries can only be classed, as we have lately had occasion to notice, with Swift’s derivation of *Achilles* from *A kill-ease*, or *Andromache* from *Andrew Mackie*.

It has often been observed, that erudition impairs the judgment, and that those who overburden the memory are liable to paralyse the reason. We do not give to this opinion an unqualified assent; yet the habit of always seeking for authorities may generate an undue reliance on authority; and the practice of micrological research may habitually magnify little arguments into equipollence with great ones. With due allowance for the

natural foible of an antiquary, a credulous confidence in his own system, our author is entitled to high praise both for classical learning and recondite research. His style is pure: his page is striped with quotations, and speckled with Greek and Hebrew words: and his devious reading has climbed the prospective hills of poetry, and penetrated the misty caverns of Platonism.

ART. II. — *Thalaba the Destroyer, a metrical Romance.* By Robert Southey. 2 Vols. Small 8vo. 14s. Boards. Longman and Rees.

PERHAPS no work of art so imperfect ever announced such power in the artist—perhaps no artist so powerful ever rested his fame on so imperfect a production—as *Thalaba*. The author calls it a metrical romance; he might have called it a lyrical one; for the story is told, as in an ode, by implication; not directly, as in an epopœia. It is a gallery of successive pictures. Each is strikingly descriptive: the circumstances strongly delineated, and well selected; but the personages, like the figures of landscape-painters, are often almost lost in the scene: they appear as the episodical or accessory objects. We observe the sea in storm, beating its waves of foam against a cloud-capt rock; but we scarcely heed the stranded corse of Ceyx, or the wild woe of Alcyone. The painter is as accomplished as Poussin: the vigilance of his mind is exerted in the minutest as in the greatest features: not a tree which the botanist, not a building which the architect, not a drapery which the costume-studier, not an emotion which the actor, would wish away or wish otherwise: everywhere warm fancy, exquisite feeling, busy thought. Yet these are not historical pieces, which is what one expects; but views, prospects, descriptions merely, in which the historical anecdotes occur, as if by accident, in order. It is theatric representation reversed: the places seem the realities; the actors the fictitious existences.

No arguments are prefixed to the books of *Thalaba*; in many places it would be difficult to infer the argument, and to write down, in lucid order, the adventures of the personages. Every being bursts into luminousness, like figures in the phantasmagoria; and, before one can ask, Whence and whither dost thou fly? another springs before us more mysterious and awful, which, in its turn, becomes distincter as it recedes. The verse itself seems to have the wildness and the power of incantation; to call down at will the moon from heaven, or build a palace in the desert; to bid the gardens of Paradise blossom, or the destroying Samiel commence his blast.

So novel a romance it is difficult to praise or to blame too

much; and it is more natural, or at least more in unison with the tone of the poem, to do both rhapsodically than methodically, as the alternate but not evanescent impressions occur, than, according to the prescriptive rules of criticism, by the successive analysis of fable, characters, machinery, and style, and the orderly discussion of its historic, ethic, fantastic, and phraseologic peculiarities.

The first time this poem is perused, if it be allowed to judge of others by ourselves, it leaves a strong, but a confused and confusing impression: the memory has attached to itself many a grand moment, many a terrible picture; but there is a want of concatenation, of mutual dependence, of natural arrangement, which renders it impossible to revert in their order to the several parts of the narrative. The adventures do not enough grow out of one another: the fable somewhat wants cohesion: nor is it wholly consistent. The more abrupt and lyrical the form of narration, the more obvious and connected should be the structure of the story: the more wild and rambling the march of event, the more lucid and historical should be the form of narration.

But, after repeating the perusal, when an outline of the story is mapped in the mind, when the main design is become distinct, when the distractions of surprise have relented, and the impatience of curiosity is benumbed, the poem will be frequently interrupted, to give vent to interjections of applause, and to break loose into thrilling exultations of delight.

The hero, however, is far from being an interesting character. His motives are not of this world. His hopes, his fears, his loves, are alien to human nature. A child of destiny, miraculously reared to destroy, by the seizure of talismans, a subterraneous convent of magicians, has little to recommend him to our warm sympathy. These magicians render themselves odious by their attempts on the life of Thalaba; but, in the first instance, they seem to have a right to their house and home. When, at length, this enchanted dwelling crumbles to pieces, and buries the hero in its ruins, we find an end, but not the end of the story. Moral marvels (and the mind of Thalaba, exalted by some unaccountable faith to an indifference for danger, is one) do not act in the imagination like physical marvels. We attribute inferior powers to the mind, and superior powers to the matter, whose extraordinary operations are the subject of our wonder. When the shepherds come to see Orlando, pulling up trees to trouble the rivulet, they call him insane; but, if they had seen a whirlwind do the same, they would have considered the object as sublime. We know by intuition the laws of mind, and can perceive that the absence of caprice is a perfection. But what we suspect of the laws of nature is mere inference from outside appearance: we think, therefore, most

highly of that nature, whose outside appearance is most striking. Hence fanaticism, which generates moral miracles, is one of the worst—and magic, which generates physical miracles, one of the best—topics for a poet. Schiller's Joan of Arc is too fanatical to interest; we only wish her in Bedlam. Mr. Southey, in the delineation of that heroine, has kept within prudent limits; but the characters in *Thalaba* have something supernatural in their turn of mind, which surely intercepts very much our fellow-feeling.

Indeed, the supernatural characters are the proper heroes of this poem: it is a war of the gods: the action passes among the machinery; every utensil is a talisman; every speech a spell; every incident a prodigy. The figures that appear human are dæmons in disguise, or genii metamorphosed; and even the most natural appearances are effects, not of nature, but of magic. Conformably to the advice of Petronius, the poet is more among deities than men: but what is gained in grandeur is lost in participation. The marvellous must have its conditions, or it mars the moral agency. Where the most gordian knot of difficulty can be untied with an amulet; where a simoom can paralyse the assassin, who has overcome all other difficulties; where every possible change of situation is equally probable; that anxiety is seldom excited, which human energy struggling with difficulty never fails to inspire. Machinery is most in its place when it decorates, without influencing, the human action of the epopœia. If Pallas descend from heaven, and command Achilles to sheath his sword, there already existed, in his sense of subordination, a sufficient motive for his conduct. If Jupiter be detained on Ida by his consort, while the party he favoured suffers discomfiture, there is still a sufficient quantity of human effort in motion to account for all the terrestrial events. Iris may assume the form of Laodice, to draw Helen to the Scæan gate; but if Iris had not done it, the real Laodice would. Let the gods be busy, but like the sylphs in the Rape of the Lock, so that the whole action could go on as well without as with their interposition; else the epic poet will fall short of the dramatist in exciting the trepidations of sympathy.

The style of *Thalaba* has a plasticity and variety, of which epic poetry offers no other example. The favourite formulas of every school of diction have been acquired, and are employed. Many passages display the genitive substances and conjunctions-copulative of the Hebrew, many the picturesque circumstantiality of the Italian, and many the interjected onomatopœias of the German writers: less predilection is shown for the compound adjectives of the Greeks, for the sentences without particles of the Latins, or the abstract allegoric personifications of the English. In turn, the ballad lends its affecting simplicity, the heroic poem its learned solemnity, the drama its di-

alogue form, and the ode its versatility of metre. All the fountains of expression are brought together, and gush, with sousing vehemence and drifting rapidity, on the reader; who admires, but not at ease, and feels tossed as in the pool of a cataract, not gliding as on a frequented stream. This stunning impression of the style gives pain, we believe, especially to mere English scholars, and to those whose comparison of art is narrow and confined, but falls within the limits of pleasure, and is even a cause of luxurious stimulation, to readers of a wider range and a more tolerant taste. The epithets are judiciously chosen; they are never trivial, never superfluous; they are accommodated, not merely to the substantive they accompany, but to the point of view in which it then attracts notice; and they are studiously picturesque and striking. The more extended sweeps of description are executed with equal skill: the selection of circumstance is always exquisite; the imagery suggested to the mind is always sensible, vivid, distinct. Thomson and Cowper are among the best of our describers; but they are surely left behind by the descriptions in *Thalaba*: there is here no pedantry, no Latin verbiage incapable of exciting pictures in the mind, no substitutions of personified abstractions to definite sensible action. We think, however, that spirit, neatness, and conciseness, might yet, in many places, be added, by expunging superfluous particles, *ands*, *ofs*, *ors*, and *auxiliaries*: that some lines cannot appear metrical, even on the new principles; for instance (iv. 202) —

‘ *And his camel than the monstrous elephant* ’ —

and that a more habitual use, in the merely narrative passages, of decasyllabic blank verse would diminish the public prejudice against the language.

We shall allot a few words to each book. As this author is in the habit of re-casting his productions, it is not impossible that criticism may for once vent her ‘envy, malice, and all-uncharitableness,’ to some purpose; and eventually contribute, not to the disparagement, but to the further embellishment, of excellence.

Book I.—The incipient description is elegant, and the subsequent picture of Zeinab and her child pathetic: yet we should advise the sacrifice of this whole book, and the transplantation of its scattered beauties. It is not pleasant to become acquainted with the hero in his childhood: Perdita exposed in the first act, and married in the last, is not, to the spectator’s fancy, the same being. Unless the education of *Thalaba* had been so peculiar as to account entirely for his enthusiasm, it is better left to imagination; and the whole story of Hodeirah’s murder, and of the sufferings of Zeinab, might as well be told in the second book by Okba, when the time arrives for endeavouring to atone

for his original omission by a second attempt on the life of Thalaba. The progress of the story seems to require, that the motive for sparing the infant should have been, that he resembled Laila as he slept. The loss of the episode of Aswad, we should not regret. Firstly, because it is an episode, which is itself an imperfection: it contributes in nothing to the progress or catastrophe of the main action. Secondly, because it infuses a dissatisfactory opinion of the divine retribution; and this diminishes our anxiety for the accomplishment of those decrees, which Thalaba is to be an instrument in fulfilling. Thirdly, because the story hinges on pity for a camel; and there is a much more interesting anecdote of a suffering camel in the fourth book.

Book II.—This is, on the whole, very fine. Perhaps if it had been made a part of the oracular prophecy, that the Domdaniel would be destroyed by a youth 'who had not known woman,' the love of Thalaba for Oneiza, the disposition of Moath to unite them, the preparation for their nuptials in the seventh book, and the interposition of Azrael to destroy Oneiza in the very bridal chamber, would all acquire an additional tragic interest. The destruction of Abdaldar by the blast of the desert borders too much on accidental death. 'The nature of the drama,' (says Schiller, in the preface to *Fiesco*) 'is incompatible with the finger of chance, or with the immediate interference of Providence. According to history, an accident terminates the life of Fiesco just as he is attaining the summit of his wishes; and it is this undramatic solution which has hitherto deterred the artist from bringing his conspiracy upon the stage.' The same principle applies to the epopœia: unconditional wonders, by preventing specific expectation, intercept curiosity and interest. No fear can, in any circumstance, be felt for Thalaba's safety, if such critical interventions in his behalf are to occur without any apparent cause.

Book III.—This book supplies a delightful repose after the terrific scenery of the preceding; but the departure of Thalaba is motivated by too trifling a cause.

Book IV.—An admirable Arabian desert-scene we shall transcribe.

' The wily sorcerer willingly assents,
And farther in the sands,
Elate of heart, he leads the credulous youth.

' Still o'er the wilderness
Settled the moveless mist.
The timid antelope that heard their steps
Stood doubtful where to turn in that dim light,
The ostrich, blindly hastening, met them full.
At night again in hope,
Young Thalaba laid down;

The morning came, and not one guiding ray
 Thro' the thick mist was visible,
 The same deep moveless mist that mantled all.
 Oh for the vulture's scream
 That haunts for prey the abode of humankind!
 Oh for the plover's pleasant cry
 To tell of water near!
 Oh for the camel-driver's song!
 For now the water-skin grows light,
 Tho' of the draught, more eagerly desired,
 Imperious prudence took with sparing thirst.
 Oft from the third night's broken sleep,
 As in his dreams he heard
 The sound of rushing winds,
 Started the anxious youth, and looked abroad,
 In vain! for still the deadly calm endured.
 Another day past on,
 The water-skin was drained,
 But then one hope arrived
 For there was motion in the air!
 The sound of the wind arose anon
 That scattered the thick mist,
 And lo! at length the lovely face of heaven!

' Alas . . . a wretched scene
 Was opened on their view.
 They looked around, no wells were near,
 No tent, no human aid!
 Flat on the camel lay the water-skin,
 And their dumb servant difficultly now,
 Over hot sands and under the hot sun,
 Dragged on with patient pain.
 But oh the joy! the blessed sight!
 When in the burning waste the travellers
 Saw a green meadow, fair with flowers besprent,
 Azure and yellow, like the beautiful fields
 Of England, when amid the growing grass
 The blue-bell bends, the golden king-cup shines,
 In the merry month of May!
 Oh joy! the travellers
 Gaze on each other with hope-brightened eyes,
 For sure thro' that green meadow flows
 The living stream! and lo! their famished beast
 Sees the restoring sight!
 Hope gives his feeble limbs a sudden strength,
 He hurries on!

' The herbs so fair to eye
 Were senna, and the gentian's blossom blue,
 And kindred plants that with unwatered root
 Fed in the burning sand, whose bitter leaves
 Even frantic famine loathed.

In uncommunicating misery
Silent they stood. At length Lobaba cried,
"Son we must slay the camel, or we die
For lack of water! thy young hand is firm,
Draw forth the knife and pierce him!"

 'Wretch accurst,
Who that beheld thy venerable face,
Thy features fixed with suffering, the dry lips,
The feverish eyes, could deem that all within
Was magic ease, and fearlessness secure,
And wiles of hellish import? the young man
Paused with reluctant pity; but he saw
His comrade's red and painful countenance,
And his own burning breath came short and quick,
And at his feet the gasping beast
Lies, over-worn with want.

Then from his girdle Thalaba took the knife
With stern compassion, and from side to side
Across the camel's throat,
Drew deep the crooked blade.

Servant of man, that merciful deed
For ever ends thy suffering. But what doom
Waits thy deliverer! "little will thy death
"Avail us!" thought the youth,

As in the water-skin he poured
The camel's hoarded draught:
It gave a scant supply,
The poor allowance of one prudent day.

 'Son of Hodeirah, tho' thy steady soul
Despaired not, firm in faith,
Yet not the less did suffering nature feel
Her pangs and trials. Long their craving thirst
Struggled with fear, by fear itself inflamed;

 But drop by drop, that poor,
That last supply is drained!
Still the same burning sun! no cloud in heaven!
The hot air quivers, and the sultry mist
Floats o'er the desert, with a show
Of distant waters, mocking their distress!

 The youth's parched lips were black,
His tongue was dry and rough,
His eye-balls red with heat.

His comrade gazed on him with looks
That seemed to speak of pity, and he said

 "Let me behold thy ring,
It may have virtue that can save us yet!"

 With that he took his hand
And viewed the writing close,
Then cried with sudden joy

 "It is a stone that whoso bears

The genii must obey!
 Now raise thy voice, my son.
 And bid them in his name that here is written
 Preserve us in our need."

"Nay!" answered Thalaba,
 "Shall I distrust the providence of God?
 Is it not He must save?" Vol. i. p. 228.

Book V.—This book is much in the spirit of oriental fiction: the story of Zohak is a translation from the first book of Firdosi's *Shah-nameh*.

The second volume of *Thalaba* commences with the sixth book, which contains several driftless adventures that have neither pretext nor object. The paradise of Aloaddin is not delineated with a pencil so voluptuous as Acrasia's bower of bliss; but its severer chaster luxury is still beautiful. The presence of Oneiza is insufficiently explained.

The seventh book would be very interesting, if a certain suspense overhung the prepared nuptials of *Thalaba* and *Oneiza*. The unexpected catastrophe lessens the pathos of the chilling words—

'Who comes from the bridal chamber?
 It is Azrael, the angel of death.'

In the eighth book the visit of *Thalaba* to the witches, who spin a bond about his hands, is well narrated; but it is more in the spirit of Gothic than of Arabian fiction: there is another snow-scene in the eleventh book, which would adorn a *Kamtshatkan* tale. The apology made in the concluding note, for the inexplicable enthronement of *Mohareb*, is insufficient: it would have been easy to have made *Mohareb* the sultan of the seventh book, and to have ennobled him into a worthy antagonist: there is always a loss of interest, as well as of concatenation, in dropping old personages, and introducing new ones: we had already, in *Aswad*, a spare sultan.

Book IX.—The charm, which opens this book, is wondrously well painted: it is more than painted; it is created! it breathes! it lives!—We must transcribe.

"Go up, my sister Maimuna,
 Go up, and read the stars!"
 'Lo! on the terrace of the topmost tower
 She stands; her darkening eyes,
 Her fine face raised to heaven,
 Her white hair flowing like the silver streams
 That streak the northern night.
 'They hear her coming tread,
 They lift their asking eyes,

Her face is serious, her unwilling lips
Slow to the tale of ill.

"What hast thou read? what hast thou read?"

Quoth Khawla in alarm.

"Danger . . death . . judgement!" Maimuna replied.

"Is that the language of the lights of heaven?"

Exclaimed the sterner witch,

"Creatures of Allah, they perform his will.

And with their lying menaces would daunt

Our credulous folly. . . Maimuna,

I never liked this uncongenial lore!

Better befits to make the sacrifice

Of divination; so shall I

Be mine own oracle,

Command the victims thou, O king!

Male and female they must be,

Thou knowest the needful rites.

Meanwhile I purify the place."

'The sultan went; the sorceress rose,

And north and south and east and west

She faced the points of heaven,

And ever where she turned

She laid her hand upon the wall,

And up she looked and smote the air,

And down she stooped and smote the floor,

"To Eblis and his servants

I consecrate the place,

Let none intrude but they!

Whatever hath the breath of life,

Whatever hath the sap of life,

Let it be blasted and die!"

'Now all is prepared;

Mohareb returns,

The circle is drawn,

The victims have bled,

The youth and the maid.

She in the circle holds in either hand

Clenched by the hair, a head,

The heads of the youth and the maid.

"Go out ye lights!" quoth Khawla,

And in darkness began the spell.

'With spreading arms she whirls around

Rapidly, rapidly

Ever around and around;

And loudly she calls the while

"Eblis! Eblis!"

Loudly, incessantly,

Still she calls "Eblis! Eblis!"

Giddily, giddily, still she whirls,

Loudly, incessantly, still she calls;

The motion is ever the same,

Ever around and around;

The calling is still the same

Still it is "Eblis! Eblis!"

And her voice is a shapeless yell,

And dizzily rolls her brain,

And now she is full of the fiend.

She stops, she rocks, she reels!

Look! look! she appears in the darkness!

Her flaming hairs curl up

All living, like the meteor's locks of light!

Her eyes are like the sickly moon!

'It is her lips that move,

Her tongue that shapes the sound,

But whose is the voice that proceeds?

"Ye may hope and ye may fear,

The danger of his stars is near.

Sultan! if he perish, woe!

Fate has written one death-blow

For Mohareb and the foe?

Triumph! triumph! only she

That knit his bonds can set him free."

"She spake the oracle,

And senselessly she fell." Vol. ii. p. 139.

Greeks! Latins! come with your Pythonesses! Where is there a description like this? Edinburgh reviewers, tamers of genius, come and vaunt couplets and habitual metres, and show us an effect like this! Ghost of Boileau, scowl! we will enjoy.

The tenth book contains the adventure, or love may we call it, of Lailah and Thalaba: it is thus, by immingling human affections and feelings, that tales of enchantment may most securely be rendered interesting. The poet seems himself aware of his error, by the exclamation (x. 224)—

'Everywhere magic! the Arabian's heart

Yearned after human intercourse.'

The eleventh book is less distinguished for dramatic than descriptive merit.

The twelfth contains the catastrophe: it has grandeur, sublimity, terror; but, like the last book of the *Æneid*, it appears to want the matrimonial festivities to render the solution triumphant; yet it would not have been wise to record them. The event is accomplished too much by faith, too little by courage; it is the catastrophe of a martyrdom.

The notes are worthy of the commentator of *Vathek*: it would be well, in a future edition, to arrange them at the end of the several books. Some are superfluous: an injudicious

one is that concerning old Poulter's mare, which tends to render ridiculous a most beautiful passage of the text. We wish that arguments were prefixed to the several books, and that some suppressions were made of feeble passages and almost identical scenery: perhaps the amount of two books could be withdrawn, with advantage to the remainder.

ART. III.—*A System of theoretical and practical Chemistry. With Plates. By Frederick Accum, Teacher of practical Chemistry, Pharmacy, and Mineralogy, &c. &c. 2 Vols. 8vo. 18s. Boards. Kearsley. 1803.*

WE had lately occasion to consider the comparative advantages of the different plans which authors have adopted in their elementary chemical works, and expressed our disapprobation of the late refinements in this respect, which, though justified as purely and rigorously synthetical, yet have stepped too far beyond the common sensible objects to become interesting or intelligible to the learner. It has indeed been difficult to define chemistry, to fix its limits between an art merely operative, and a science distinct from natural philosophy. Were it once defined, a plan might more readily be discovered; as Dr. Black, by limiting it to the doctrines of heat and mixture, formed thence the two great divisions of his Lectures. The object of chemistry, according to our author, is 'to investigate and account for the changes produced in all bodies in nature by the mutual action of their parts on each other, by means of which their physical properties are altered, and their individuality destroyed.' We think this definition simple, comprehensive, and discriminative. It perhaps does not exclude Galvanic operations; nor are these yet so well understood, as to enable any author to include them in or reject them from a given branch of science. Should the objection be well founded, it will prove only what we have often had occasion to remark, that the infinite variety of nature sets system at defiance. Perhaps chemistry might properly be defined, the mutual actions of the smaller particles of matter, either in decomposing natural bodies, or producing new compounds. Whichever may be adopted, the object of the science is natural bodies, which admit of changes either by further resolution, or by union. In either case it will be indifferent, according to any logical rule, whether they are considered as masses to be resolved, or as simple bodies to be compounded; and, as the former convey more clear ideas, are better known, and already familiar by daily use, we think that they should be first considered.

Mr. Accum, in his division of the objects of chemistry, comes very near this view. The first division contains simple sub-

stances, *viz.* caloric and light. These are well known; and the step from physics to chemistry is thus short and easy. In pursuing the subject, in the following section, the difficulty is not considerable. This contains sulphur, phosphorus, and the diamond. The mind of the student will revolt at perceiving the last body among the simples, and will wonder why coal and amber should not be as well retained as sulphur and the diamond; but this difficulty will soon be conquered; and he will proceed, without further inconvenience, to the metals, earths, and salts, either alkaline or acid. This brings the learner to the last section, *viz.* 'substances not yet producible by art, but analogically considered as simple,' *viz.* the different gases.

This is not, however, the order of our author's work. After considering heat and light, he proceeds to the bases of the gases, *viz.* oxygen, hydrogen, and nitrogen (azote). He then treats of sulphur, phosphorus, and the diamond; to which succeeds the account of the different gases. With these the first volume concludes. This arrangement is apparently neither natural nor artificial; for, though some of the gases are among the simplest compounds, others contain numerous ingredients; and every refinement of this kind seems more inconvenient than useful—the source of difficulty, rather than the means of elucidation.

Though we do not agree with Mr. Accum in his divisions of the subject, we think his work, as an elementary treatise, highly valuable. It is clear, explicit, and comprehensive. The different properties of bodies are detailed with perspicuity, and supported by easy apposite experiments. The particular descriptions are preceded by a clear account of the nature of chemical action; and the *facts that demonstrate* the attraction and repulsion of bodies, which are improperly comprised under the term 'theory,' follow. The general laws of corpuscular attraction ('the attraction of aggregation'), with the nature of chemical affinity (affinity of composition), are explained with peculiar simplicity and precision; and the latter is illustrated by easy experiments.

Heat, the great agent of the chemist, is explained at length, and its laws illustrated by elegant familiar experiments. Latent heat has the more appropriate title of 'caloric of fluidity'—more properly, the heat essentially necessary to fluidity and a state of vapour. Mr. Accum speaks of the two opinions respecting heat, without deciding on the preference of either; but the whole tenor of his language and reasoning leans to the system, that heat is a peculiar body; and perhaps the delicacy of his situation prevented his opposing too pointedly the ideas of count Rumford and Mr. Davy, revived from former systems, that heat consists only in intestine motion of the particles of a body.

Mr. Accum considers light as a substance entering into the composition of bodies, and separated from them like any other principle. At first, he seems to think gases form the union of heat and light with their respective bases, but afterwards appears to admit that the heat proceeds from the gases, and the light from the body burnt. He had before mentioned the idea of light and heat repelling each other, without deciding on the truth of the system; and his theory of combustion seems to proceed on that principle. This he considers as a modification of Lavoisier's doctrine, by Gren and Leonhardi, &c. We noticed this subject very lately, in our review of Dr. Thomson's Chemistry; and some observations which have been sent to us on that article have led us to a little inquiry. The opinion, that light is a body, that it can be traced as a component part of bodies, and that, in combustion and explosion, the simultaneous appearance of heat and light arise from their repelling each other, was published in the Exeter Essays, as we perceive from the advertisement, in July 1796. Gren, to whom this doctrine is ascribed, collected his smaller work from his more extensive system in that year; but it was not published till two years after; and never appeared in England till 1800, when it was translated. Even then the doctrine was very different; for he contends that light requires the addition of caloric to become expansive and elastic; since light, he thinks, is never perceived, until the temperature is somewhat raised. M. Richter's doctrine is still further removed than that we have just mentioned, and was never within the reach of the English chemist, till, some years afterwards, a short abstract was given of his system in the '*Annales de Chymie*.' If this be, therefore, found a correct view of the subject, the merit is undoubtedly Dr. Parr's. It has been claimed as such, in Nicholson's Journal, without any opposition; quoted as his by Dr. Thomson; and more recently mentioned in the same light in the *Philosophical Magazine*.

The doctrine of the gases is very extensively and ably explained; and, from this part of the volume, we shall select a passage on a point concerning which philosophers have by no means agreed.

Having thus ascertained the nature and the proportion of the component parts of air, it remains only to enquire in what manner these component parts are united. Are they merely mixed together mechanically, or are they combined chemically? Is air a mechanical mixture or a chemical compound? Philosophers seem at first to have adopted the former of these opinions, if we except Scheele, who always considered air as a chemical compound. But the supposition that air is a mechanical mixture, by no means agrees with the phenomena which it exhibits. If the two gases were only mixed together, as their specific gravity is different, it is scarcely possible that they

would be uniformly mixed in every part of the atmosphere. Since therefore air is in *all places* composed of the same ingredients, exactly in the same proportions, it follows that its component parts are not only mixed, but actually combined. When substances differing in specific gravity combine together, the specific gravity of the compound is usually greater than the mean. This holds good also with respect to air. The specific gravity, by calculation, amounts only to 0.00119, whereas it actually is 0.0012.

'We must therefore consider air as a chemical compound. Hence the reason that it is in all cases the same, notwithstanding the numerous decomposing processes, to which it is subjected. The breathing of animals, combustion, and a thousand other operations, are constantly abstracting its oxygen, and decomposing it. The air thus decomposed or vitiated, no doubt ascends in the atmosphere, and is again, by some unknown process, re-converted into atmospheric air. But the nature of these changes is at present concealed under an impenetrable veil.' Vol. I. p. 233.

The second chapter commences with metals, which our author divides into five classes: '1. very brittle and acidifiable metals'—arsenic, tungsten, molybdena, chrome, and columbium; '2. less brittle and simply oxydable metals'—titanium, uranium, cobalt, nickel, manganese, bismuth, antimony, and tellurium; '3. partly ductile and oxydable metals'—mercury and zinc; '4. very ductile and easily oxydable metals'—tin, lead, iron, copper; '5. exceedingly ductile and difficultly oxydable metals'—silver, gold, and platina. The arrangement is not happy. The first great division is well founded—viz. into brittle and oxydable metals. The latter division should have been subdivided into brittle and ductile. Zinc, as partaking of both properties, should have been placed at the bottom of the first class, and the others arranged in their present order, according to the degree of their oxydability. The properties of the particular metals are, as usual, very clearly and judiciously explained. Tantelite, discovered since the part which relates to metals was printed, is added at the end. It is an acidifiable metal.

The earths described are silex, alumine, glucine, zircon, agustine, yttria, and magnesia. The alkalies are barytes, potash, soda, strontia, lime, and ammonia. The first, third, and fourth, are thus removed from the class of earths; but their properties are undoubtedly alkaline. The order is, however, exceptionable. Lime should have preceded barytes, and strontia should have followed it. Barytes and lime are nearly related, and lime connects the alkalies with earths. Strontia and barytes differ little more than soda and potash.

The decomposition and formation of water are next considered and illustrated. This part is succeeded by the subject of acids. These are, '1. those whose bases are unknown, or undecomposable acids'—viz. the muriatic, boracic, and the fluoric

acids; '2. those composed of two bases'—the oxygenated muriatic, the sulphuric and sulphureous, the phosphoric and phosphorous, the carbonic, the nitric and nitrous, the arsenic and arsenious, the molybdic, the chromic, and the columbic acids; '3. composed of more than two bases'—the acetous and acetic, oxalic, tartareous, citric, malic, gallic, succinic, benzoic, camphoric, mucous or saccharolactic, suberic, prussic, lactic, sebacic, laccic, bombic, amniotic, and uric acids. We shall select the account of the amniotic, as the others are sufficiently known.

'Amniotic acid exists in the form of a white pulverulent powder. It is slightly acid, but sensibly reddens vegetable blues. It is difficultly soluble in cold, but readily soluble in boiling water, and in alcohol. When exposed to a strong heat it exhales an odour of ammonia and of prussic acid. Assisted by heat it decomposes carbonate of potash, soda, or ammonia. It produces no change in the solutions of silver, lead, or mercury, in nitric acid. Exposed to heat, it yields ammonia and prussic acid.

'Amniotic acid may be obtained by evaporating the liquor of the amnios of the cow to a fourth part, and suffering it to cool, crystals of amniotic acid will be obtained in considerable quantity.

'Whether this acid exists in the liquor of the amnios of other animals is not yet known.' Vol. ii. p. 329.

Many of these acids, and indeed many of the earths and metals, are undoubtedly modifications of the generally known acids, particularly those from different vegetable productions; but we have often erred, from generalising too early and too hastily.

The chemistry of vegetation and of animal substances concludes this very interesting and instructive elementary work.

ART. IV.—*Charnock's History of Marine Architecture. (Continued from p. 250 of our present Volume.)*

THOUGH we felt a little dissatisfaction at the want of arrangement, and the very disproportionate attention paid to different subjects in our author's first volume, yet, when he comes to his chief object, marine architecture, we meet with less to disapprove; and, though the form be not always regular, the manner conciliating, the style polished or adorned, we find varied and important information.

In the first chapter of the second volume, Mr. Charnock gives the state of the Venetian and Genoese marine in the middle of the fifteenth century, the origin of the Portuguese as a naval power, with a list of the ships of that nation in the invincible armada. This, with our author's usual tendency to eccentricity, leads to an enumeration of the vessels in that expedition; from which it appears, that the English navy, with re-

gard to numbers, was not greatly inferior to the invaders; that some of the English ships were as large, or nearly so, as those of the Spaniards; but that, on the whole, the strength was not more than half. We hope he does not calculate like Mr. Willet, in the paper which he quotes from the *Archæologia*, that, because sir George Rodney's ship carried ninety-eight guns, *all* were fired in a broadside. An author of a naval history should know, that ships have seldom their full number of guns aboard; and a very slight reflexion would have told him, that a *broad-side* would admit but of half.

Our author is more correct when he traces the progress of the galley to the galleon and galleyas, which were vessels of war, and describes the gradual diminution of the upper works. He next speaks of the British navy, of the first great vessel of war called 'Harry grace a Dieu,' as represented in the drawing preserved in the Pepysian library. The drawing of the great Harry, as given by Allen, seems to be the source of much difficulty and anxiety. Mr. Charnock knows not of what era it can be. It may have been that built in James the First's reign by Phineas Pett, or any other; and the author repeatedly returns to the subject, but so vaguely that it is impossible to compact his observations. It was probably an imaginary figure, designed to resemble, in general, the great Harry, or drawn from a description of that ship. From the early representation, however, of such vessels, we see the foundation of many appellations of the different parts, such as the forecastle, the round top, the yard-arm, &c.

The naval history, during the reign of the two Henrys, is succeeded by that during the reigns of Edward VI, Mary, and Elizabeth. The list of the ships, at different periods of this era, is full, and probably authentic. It was the period of Drake's voyage, of the famous expedition of the armada, of the attack of Cadiz, the intercepting the plate-fleet, &c. It were to be wished that our author had given more than the names and force of the ships on each occasion; but this is certainly no part of marine architecture.

The fourth chapter relates to the modes of offence in the marine, and particularly of the early invention of fire-ships, as well as the methods employed against the effects of combustibles. Some observations on the inconvenience of building vessels too high are subjoined; and one instance of a ship upsetting in harbour from this cause is recorded. In this early stage of marine history, we see the Venetians claiming sovereignty over the Adriatic, and the Genoese over the Ligurian Gulf. The history of the civil arrangement or economy of ships follows, with the form of a letter of marque and reprisals, issued in the 36th year of Henry VIII. The lists preserved in this chapter offer some minute circumstances of importance in marine

history, particularly the information that the cities and the men of rank, connected with the captain, procured at least a part of the crew, and contributed to man the vessel. The minutest history of the navy is continued in the sixth chapter; and its decline, during the reign of Mary, properly noticed. We then once more return to the armament sent to Cadiz under Essex—an event seemingly again recorded to bring the authentic documents of the English marine to the end of the sixteenth century. The conclusion from this collection is, that, though the national navy was greatly diminished, the commercial shipping was considerably augmented.

The marine history of the seventeenth century commences with that of Venice, Genoa, Spain, France, and Holland; and the first chapter extends to the middle of that period. The rapid progress of the Dutch marine is explained, and is followed by a description of the despicable state of the Russian, and the decline of the Danish, navy. The efforts of Gustavus Adolphus to add to the Swedish maritime power are particularly dwelt upon; and the ships of war collected by that monarch are enumerated. In this period, the Turks seem scarcely to have awakened from the lethargy of ignorance and bigotry, and deserve the little notice they receive.

The marine architecture of the æra before us received but little improvement; and some part of our author's general view we shall select.

* In respect to burthen and force, the case was different: the Spanish and Portuguese ships of war still maintained that pre-eminence, which the inhabitants of those countries appear to have established among themselves as an indispensable preliminary to superiority and perfection. Before the end of the sixteenth century, some of their vessels mounted nearly eighty carriage-guns; and in tonnage, are supposed to have exceeded, in a still greater degree, those of all other nations. The largest ship belonging, at this time, to the English navy, carried only fifty guns, or cannon, which could properly deserve that name, and was scarcely of half the size or burthen the Spanish first rates were. The Dutch and the northern powers were still more moderate: the former endeavouring to obtain a consequence by dint of numbers; the latter, content with having equipped a force sufficient to maintain a rank in their own secluded quarter of the world, and, while they actually preserved a scale of force relatively equal to that of each other, they did not, for a series of years, disturb themselves to enquire, what was the burthen, or what number of guns, were mounted on board ships which belonged to states, that, from their distance and unjarring interests, were unlikely to engage in any hostile dispute with their own.

* Independent of this mild, this inoffensive conduct, which rarely marked the policy of southern states, there existed a natural impediment to an imitation of the example of the Spaniards, or any other people who placed their whole confidence in the superior magnitude of

force of their ships. The tempestuous weather, so frequent in the northern latitudes, and the shallow entrance which the ports of Holland, Sweden, and Denmark, afforded to shipping, appeared to dictate the extent to which nature intended they should carry science in that respect, and the irrevocable edict that her will should not be transgressed. As the ambition of the United Provinces, who were at first modestly content with the power of merely defending themselves, and that of the northern potentates, no longer satisfied with the ability of keeping each other in check only, began at last to expand, and prompted them, of course, to the construction of vessels, superior in dimensions to those which they at first possessed: ingenuity became necessary to obviate the difficulties, and overcome the obstacles, which nature, unkindly, as they respectively thought, had thrown in the way of its gratification. From this situation of things, in which nature and politics were at variance, arose the construction of vessels calculated to carry, with a proportionate crew, a superior number of guns; while from their breadth, together with the flatness of what is called their floors, they possessed that consequent shallow draught of water, which for some time distinguished the ships belonging to the United Provinces from those of almost every other state. Nothing being more prevalent than fashion, the same ideas extended themselves among the naval architects of the still more northern powers: so strongly did they take root, that, in particular classes of commercial vessels, such as the bilander, the dogger, the galliot, and the schoot, the difference between those built by them, the Hollanders, or any other people inhabiting the Seven United Provinces, is still so trifling, that the most critical judge has scarcely the power of distinguishing one from the other. As to vessels of war, the form and varied fashion of them appears to have been confined to particular nations. The Spaniards, who maintained the pre-eminence among the southern potentates, as before observed, extended their burthen to two thousand tons, some of them mounting ninety guns; while in the English navy, as will hereafter be seen, there was only one ship, during the same period, which reached fourteen hundred tons, the *Prince*, of sixty-four guns. The largest of the Dutch ships were but of one thousand tons burthen, carrying sixty guns; the Danish first rates were nine hundred tons, and mounted fifty guns; the Swedish, eight hundred tons, and forty guns.' Vol. ii. p. 174.

Sir Robert Dudley's proposed improvements in marine architecture show an intelligent and comprehensive mind; but they are now of little importance, and will be unintelligible without the plates.

The sudden decline of private shipping, in the beginning of the reign of James I, and its equally rapid increase, are well explained; and James's attachment to commerce, particularly to that with the East Indies, is pointed out, though not in so general and comprehensive a view as the subject demands. In reality, the whole history is too much frittered in every part. We have numerous intermisses, when one substantial dish would have pleased us better. In marine architecture, great

improvement is observable; and the *Prince Royal*, built by sir Phineas Pett, subtracting the ornaments, is of almost the modern shape.

The minuter details of the expenses of the navy, in the beginning of the seventeenth century, follow, with some economical arrangements and miscellaneous information in the civil line. James improved its state, and added to its force, but was unwilling to employ it. Charles the First made some additions; and ship-money was the unfortunate spark which kindled the fatal flame that destroyed him. Yet, with this assistance, Charles had awed Holland and France; nor was the slightest suspicion of any mismanagement or peculation suggested. The mode of raising it was sanctioned by custom, unfortunately not by law. The firm hands of the Tudors had exercised many similar prerogatives; but the weakness of a David could not fight with the spear and shield of Saul. The sums expended on the Royal Sovereign were the source of some clamour; and, as if she were always to occasion a difference of opinion, we may add, that she here receives much too large a share of the historian's attention. The impolitic assistance given to the French king, by Charles, is stated in a stronger light than in our usual accounts.

'One of the first absurd steps of Charles, soon after his accession, was his sending Pennington in the *Vanguard*, with six other ships, over to France, to assist the French king in enslaving his protestant subjects. Pennington, when he came to understand the infamous service he was to be employed in, with a true English spirit refused it: upon which the king sent him orders, under his sign manual, to deliver the ships into the hands of a French officer at Dieppe. These commands were obeyed by the admiral; which as soon as he had done, he struck his flag, quitted his ships, and with every officer as well as seaman belonging to them (except one) are said to have returned home.' Vol. ii. p. 269.

The chapter is concluded by the few events in the marine history during the contest between the king and parliament; and a curious extract from Fuller's *Worthies*, containing the history of the British fleet at that period, which includes nearly its history during the reign of the Stuarts.

The author returns to the history of the Venetian and Genoese marine, from the middle to the conclusion of the seventeenth century. The naval history of France and Spain is again resumed; and the attempts of Lewis XIV to form a navy are detailed. We need not enlarge on a portion of history so recent, of which not a single fact or circumstance is put in a new light. Such were the exertions of the French, that, in 1672, notwithstanding their losses and defeat in the West Indies, their navy amounted to fifty sail of the line. This denomination, however, included fifty-gun ships, and even infe-

nior vessels; forty were of the lowest class. The number of frigates and smaller vessels was in proportion. About the same time (1679) bomb-vessels were invented by a Frenchman, Bernard Renau d'Elisagaray; and by continued exertions, at one period, between the years 1689 and 1692, France possessed ninety-six ships of two decks stationed in the European seas. The naval events, previous to the peace of Ryswick, are shortly detailed; and, at this epoch, it is asserted that Lewis was left, after every disaster, in possession of nearly seventy ships, then considered to be of the line.

The Dutch marine, with the naval history of the northern powers, follows; but we find little relating to the chief subject—marine architecture—and nothing so particularly interesting as to detain us. The naval events of England, during the protectorate, and the decided as well as spirited conduct of Cromwell, are properly detailed. Those under the reign of the second Charles are stated at a somewhat greater length; but the tale, in effect, has been already told in the naval history; and the lists only of the English shipping, at different dates, are interesting. The naval history, during the reign of William, merits no particular observation.

The last chapter of the first volume is truly valuable: it relates exclusively to the subject of marine architecture, and is illustrated by numerous plates, containing views, sections, and projections, of vessels of different dimensions. The tables, illustrating the subject, are very important; but no part will admit of abridgement.

The most striking object in the commencement of the eighteenth century is the naval enterprise of Lewis XIV. His exertions in building ships contributed to collect a navy of ninety-six sail of the line; and the skill of his naval architects rendered them so superior to the works of the English ship-builders, that they could always elude the force with which they were unable to contend. The losses of the French nation, however, were very considerable; and this preternatural exertion was followed by a proportional subsequent languor. The Spanish fleet, at this period, was inconsiderable; and, while France and England enlarged the scale of their men-of-war, the Dutch, confined by the shallowness of their harbours, appeared, in comparison, insignificant. The Portuguese navy was even less respectable than the Spanish. The Russian navy, under Peter, rose rapidly into importance and strength; and the Swedish, after successive misfortunes, declined. The Danish naval power was respectable, but not considerable.

To draw a brief comparative view of the European marine, as it stood in the year 1700, Britain might be said to possess nearly one third of the whole of that force which was especially equipped for the purposes of war; France and Holland more than a second third part;

while the minor states of Spain, Portugal, Russia, Denmark, and Sweden, could boast no greater navy, had the whole of it been united together, than what could have been sent forth from the ports of England alone. The fluctuation or alteration which was occasioned by the uninterrupted continuance of war during the first fourteen years of the eighteenth century, tended but little to affect the proportion just stated. The alteration which was produced by it was in favour of Great Britain; the losses sustained by her not having equalled, by one third, those which France had suffered within the same period. The marine of Spain had also undergone what might be considered as a total demolition; while the contests subsisting between the northern powers had prevented them, taken in the aggregate, from augmenting that total which they had possessed at the commencement of them, notwithstanding the wonderful exertion Peter the Great made to raise himself into naval consequence.

Commerce, the customary attendant of maritime pre-eminence, held not the same comparative proportion. Diverted from those more insignificant, though refreshing streams, which, had they been permitted to have remained undisturbed, according to the apparently even disposition of nature, might have better contributed to supply the supposed wants of mankind, became, in great measure, temporarily concentrated into one rapid torrent, raging on all sides as if in proud defiance of the world, and menacing destruction on any puny object which threatened to oppose its course. Holland, and the United Provinces, as had been their practice on former occasions, were, from an attentive diligence, and by a variety of artifices, enabled to acquire to themselves, in the midst of warfare, the greater share of those mercantile advantages which had, in former years, been more generally and equitably distributed over the face of all Europe. But, though possessing sufficient powers to acquire that pre-eminence in the first instance, Providence thought proper to withhold from them that degree of ability and resource in what may be called national consequence, which were necessary to maintain it. The advantages became, after a species of monopoly which continued only during the war, gradually more diffused; the naval force of the United Provinces, incompetent to its protection, sunk under the weight of its charge; and the benefits which it still continued, though in a more contracted degree, to derive from commerce, have, since that time, owed their existence to the supineness, or rather forbearance, of all the rest of Europe.

Vol. iii. p. 27.

Mr. Charnock next pursues the changes in the structure of their vessels during this period, particularly the increased size and more manageable arrangement of their ships of war, and the increased breadth of their commercial vessels, as better adapted to the augmentation of tonnage, without a proportional increase of expense. The naval history of our own country is next detailed, but offers no particular subject of remark. The lists of ships on particular stations, and in the different expeditions, as they are apparently correct, form the most valuable part: but the very extensive account of the dispute between the admiralty and merchants, respecting the neglect of commerce, is

tedious, and at this time uninteresting: at least, it forms no part of our author's design. The naval architecture received, in this period, no improvement. The English ships were bad sailers, low, crowded, and inconvenient in action.

In the middle part of the century, or rather about the end of its first half, the Spanish marine, revived by cardinal Alberoni, makes the most striking figure; and the contests in the Mediterranean, between the fleets of Spain and England, are the most brilliant objects. Peace restored tranquillity, and commerce flourished. Again the ships of war began to augment in splendor and bulk: but, in this, Spain now led the example. Under the regent, France was pacific: Fleury succeeded; and 'peace was his dear delight.'

England, however, was not at rest. Russia, Sweden, and Spain, in turn, disturbed the repose of Europe; and the English navy was kept in readiness to defend its own kingdom, to oppose encroachments, or to reconcile the enmities of others. The rupture with Spain in 1739 is the æra which, in the history before us, is most important, as Mr. Charnock here examines the state of the British navy.

The British navy, at this time, consisted, according to authentic documents, of thirty-eight ships of the line, actually in commission; namely, one of 90 guns, five of 80, twelve of 70, and twenty of 60; exclusive of nineteen ships of 50 guns, and twenty-seven vessels of inferior rates, none of which carried less than 20. Independent of these, twenty-four other ships, of two and three decks, two mounting 100 guns each; as many 90; six 80; four 70; and ten 60 or 50; besides eight frigates were ready, at a moment's warning, for immediate service. Such was the publicly avowed condition of the British navy, while that of Spain, as already remarked, notwithstanding every exertion she could make, equalled not half that number. It becomes necessary, however, to make a short remark, injurious as it may prove to the credit of marine architecture, according to the principles practised in Britain from the conclusion of the treaty of peace at Utrecht, to the period when the British navy was in the state just mentioned.

France had, in great measure, attended more to improvement than augmentation. Spain had, through necessity, been equally attentive to both. The ships of the latter, inconsiderable as the number might be, were confessedly superior to those possessed by any country in Europe. Britain, on the other hand, though in respect to numbers and nominal force, in possession of a navy exceeding that which France, added to Spain itself, could boast of, was unequal, perhaps, to the task (let not this be considered as an arrogant national assumption) of contending with half that number, had they been constructed according to the principles then practised by the Spaniards, and the combatants been transferred from the ships of one country, to those of another.

Whether it was to be imputed to Britain, that in the arrogant and supposed superiority of her numbers only, she rejected, as beneath her notice, those systems of improvement introduced by other countries;

whether her ministers were blindly lulled into security from a confidence in that terror which her nominal power was expected to create; or whether a dull and ignorant prejudice persuaded a continuance in, and adherence to, certain principles which other countries had wisely overcome, and whose example the marine architects of Britain most contemptuously disdained to follow, is a point, which it is now, and, perhaps, ever was, extremely difficult for more than a dozen persons in the whole kingdom, who prudently kept the secret securely locked within their bosoms, to decide. Certain it is, however, that although the force of the British navy might, from the recapitulation, excite terror in many countries, which surround it, yet no one, at that period, possessed a fleet, the ships composing which, were, as far as the structure and theoretical part of the science extended, worse contrived for the service of their country. Destitute of almost every principle that could constitute a ship of war, fit for the varied species of service which it must ever be prepared to enter on, they were crank, in general heavy sailers, of ill stowage, confined, and inconvenient in the hour of battle; the larger ships frequently incapable of employing their lower-deck guns, in the use of which their most efficient force consisted, except in the most moderate weather, and the smaller, particularly in the lowest classes, absolutely dangerous, except in the most tranquil seasons. These principles, and the remedies to their inconveniences, will be hereafter explained with more propriety than in this place. Suffice it for the present, that a fact is repeated, universally known as it may be to the whole world, that Britain, inferior as the qualities of her ships might be, effected the ruin of the Spanish navy, together with that of France, which, ere the conclusion of this too long subsisting dispute, most inconsiderately attempted to support the distracted cause of the former.' Vol. iii. p. 106.

In the war with Spain, which followed, and in which she was afterwards assisted by France, the British navy, though unrivaled in number, was far from being eminently triumphant. The French ships, from superior construction, were able '*fulgere et effugere*.' This was their victory, while their smaller cruisers fed on the British commerce. Yet, on the whole, the war was glorious to Britain. Many of the French ships of war fell into her hands; and, what was of more consequence, from contemplating these models, she learned to improve her own. The events of this war induced the English administration to attend more minutely, and with more scientific precision, to the construction of their ships. Sir J. Norris was consulted, who collected the best opinions from the most approved marine architects. The effects of this measure were not, however, experienced, till after the commencement of hostilities with France in 1744; and the Royal George, one of the first built on the new system, is particularly described. To this succeed descriptions of the Blenheim, the Princess Amelia, the Triumph, the Mars, Thunderer, Canada, and various ships of the lower classes. At the end of the chapter, is added a compara-

tive view of the navies of England and France at the close of the war, and of the comparative losses of the two nations.

As we approach our own times, the history before us becomes little more than a gazette. France and Spain, as well as England, greatly improved their navies in the interval of peace; and Spain acquired the assistance of many English ship-builders. The following comparison is sufficient for our purpose.

To give a complete illustration of the different systems, and for the purpose of doing it fairly, it will be necessary to begin with a comparative view of the dimensions given, at the conclusion of the preceding war, to some of the two-decked ships belonging to the three nations. To extend the comparison farther would be improper, till a future occasion shall render it expedient, inasmuch as neither the French nor Spaniards possessed, as before pointed out, a single ship of three decks till after the peace, which took place in 1763, nor did the British boast any one carrying 84 guns, on two decks, till the capture of the *Foudroyant*, in 1758, enabled them to imitate the beauties and advantages which were found to arise on the contemplation of them, as well as the experience. To commence the regular investigation, it will not be improper to select the *Shrewsbury*, of 74 guns, built in the river Thames, and launched 1750, which ship was, in extreme length, one hundred sixty-six feet and one inch; in breadth, forty-seven feet and one inch; and, according to the British calculation, of fifteen hundred and ninety-four tons burthen. The proportions just given did not experience any material augmentation, except in the instances of the *Triumph* and *Valiant*, as already stated, till after the close of the dispute with France, Spain, and the American colonies; and even then a new system began to be very sparingly pursued; the dimensions in general made choice of being, even so late as the year 1786, one hundred sixty-eight feet and three inches extreme length, forty-seven feet and four inches in breadth, and the computed burthen sixteen hundred and forty-four tons.

In the opposite scale is found the *Magnanime* of 74 guns, captured from the French three years before the *Shrewsbury* was completed. It measured in length one hundred seventy-three feet and seven inches; in breadth forty-nine feet seven inches and an half; and, according to the English method of calculating tonnage, was of eighteen hundred and thirty-two tons burthen. To pursue the comparison farther, the *Princessa* of 70 guns, taken from the Spaniards in the earlier part of the war, and before that which commenced with France, though of force somewhat inferior, was in length one hundred and sixty-five feet one inch, in breadth forty-nine feet eight inches, and one thousand seven hundred and nine tons, English burthen. To the capture of this ship has been improperly attributed, by many scientific and ingenious British writers on the subject, the first introduction of those superior dimensions and the different contour given to some of the British ships of war; but it is a well-known fact, that the first British ships built by way of experiment were from French models, as the *Valiant*, which was copied from the *Invincible*, and the *Triumph*. Vol. iii. p. 181.

In the war which followed with France in 1755—for we find little that is sufficiently interesting to detain us in the history of

the marine architecture of other countries—the navy of Great-Britain was in a flourishing state; and, during the period of hostilities, or subsequent to it, the present arrangement of the marine took place.

The naval force of America and of Asia, the Portuguese and Turkish marine, are shortly noticed, before the period when hostilities commenced with America, and ultimately with France and Spain. The American ships are described as composed of materials that quickly decayed; and the French men-of-war, though of a shape and form mathematically exact, and experimentally excellent, from the bad materials, and the careless mode of construction, are said to have been, on trial, no means durable. France, however, altered her system. She built first-rates, which she had contemptuously neglected: she rejected the fifty-gun ships, and the sixty-fours, trusting only the seventy-fours in the line, which she increased in bulk and height, so as to be able to open the lower tier in all weathers. Her frigates, though they seldom carried more than forty guns, were little inferior to the old sixties. The history concludes at the commencement of hostilities in 1792.

The more minute history of the navy, in the eighteenth century, follows; including names, dimensions, tonnage, builders, surveyors, &c. of all the ships of the royal navy, with brief remarks on their construction and improvement. To this succeeds a description of the marine of the Africans, the Chinese, the islanders of the Pacific Ocean, &c. illustrated by numerous plates.

In the thirteenth chapter, the author explains, at length, the advantages of flat-floored ships with sliding keels, the invention of captain Schank; and the great utility of caulked divisions in the hold, that the water, should the vessel spring a leak, may be confined to a single compartment, in which not so much could be admitted, as to endanger the ship's sinking.

The fourteenth chapter contains remarks on the form of a ship, chiefly with respect to stability and stiffness: but these observations scarcely admit of abridgement, and depend too much on the plates to be easily intelligible. The fifteenth chapter is on the phraseology of the writers on marine architecture, with remarks on the velocity of floating bodies of different forms; and the sixteenth, being the last, on the causes of the imperfections which have pervaded the different series of experiments in marine architecture, with various miscellaneous remarks, particularly on the life-boat and vessels constructed for similar purposes. With respect to the trim of a vessel, our author is very concise. We remember having heard a singular anecdote on this subject from a naval officer, now an admiral. He commanded a frigate peculiarly sluggish, and by no means able to keep pace with his own activity. While under sail, a

cask of water was hoisting from the hold, when the vessel sprang forward with great rapidity; and she afterwards proved one of the best frigates in the service: but it was always necessary to sling a gun about the middle of the hold.

On the whole, we are by no means pleased with this work. It is too often a marine history, imperfectly executed. The subjects are broken: the author returns to the point from which he started; and repeats a part, without offering, in any place, a complete view of the subject. Unable to give a comprehensive general view, he fatigues the mind by lists, and details often the most trifling particulars. Were we to attempt to recount the omissions, especially in the modern improvements of marine architecture, our article would be nearly doubled in its extent. The employment of carronades, the diminution of the weight and calibre of the guns, the advantages and general adoption of copper sheathing, with the numerous improvements in every part of the rigging, and the internal administration of the ship, &c. &c. should have been noticed. If it be alleged that these are not always the object of the marine architect, it may be replied, that they are more so than the subjects which fill the larger share of these volumes. We find few marks of judgment, of research, or of extensive acquaintance with his task; and suspect that his work will hold no very high rank among the histories of science or of art.

ART. V.—*Marsh's Illustration of the Hypothesis, &c.* (Continued from p. 337 of the present Volume.)

HAVING adverted in his preface to such remarks of his antagonist as were chiefly personal, Mr. Marsh proceeds to the illustration of his hypothesis, in a brief, but pertinent introduction. The object of this introduction is to state the circumstances which gave rise to his Dissertation, the grounds on which it was composed, the views toward which it extended, and the ends it was designed to effect. A Dissertation thus conducted, he conceived, was entitled to a candid and minute investigation, before it should incur condemnation. It had, at least, he maintains, to be tried by *that* test which alone can determine its truth or falsehood.

‘But my anonymous adversary’ (proceeds he), ‘without once inquiring, whether the phænomena really existed, whether they could be solved by my hypothesis, or could be solved by any other,—consequently, without once examining the foundation on which my hypothesis rested, without being able to say therefore whether it were true or false,—boldly ventured to denounce it as a thing to be rejected. In the short answer, which I made to his Remarks, I shewed that the truth of my hypothesis was no more affected, than if he had never written: and at the same time I endeavoured to remove the preju-

dices, which he had laboured to excite against it. He has returned however to the charge, with some attempts to prove, that I am mistaken: and he closes the notes which form the substance of his Reply by saying, he "must maintain that it (the hypothesis) derogates, or at least advise others to consider whether it doth not derogate, from the authenticity, integrity, credibility, and inspiration of the Gospels, for reasons already assigned." The first part therefore of this work shall be devoted to the examination of these questions: and when I have shewn, as I hope to do, that the hypothesis is perfectly consistent with the authenticity, credibility, integrity, and inspiration of the Gospels, I will employ another part in examining, whether my adversary's notes contain any thing, which can affect the truth of the hypothesis. I shall then have done every thing, which can be expected on the present occasion.' p. 6.

Mr. Marsh, having no objection to meet his adversary on his *own* ground, and readily consenting to the rejection of his hypothesis, if it cannot be reconciled with the authenticity, the credibility, the integrity, and the inspiration, of the Gospels, thus proceeds to state what the hypothesis, to be defended, really is.

'In the first place it is supposed, that there existed, prior to any of our canonical Gospels, a Hebrew document relative to Christ's ministry; and that this document contained all that matter, which is common to the Gospels of St. Matthew, St. Mark, and St. Luke. It is further supposed, that, between the time when this document was first drawn up, and the time when the Gospels were written, some additions had been made to it, consisting partly of circumstances belonging to matter already recorded, and partly of matter, which had been wholly omitted. It is supposed that St. Matthew, St. Mark, and St. Luke, had each of them a copy of the common document, thus augmented with the above-mentioned additions, and that each of them made his copy of the common document the basis of his own Gospel. The additions however are not supposed to be the same in each of the three copies; the additions in St. Matthew's copy, for instance, being supposed to be contained, not wholly in the other two, but partly in St. Mark's copy, and partly in St. Luke's copy.—Of these general suppositions, which had been all made before I entered on the inquiry, I gave an account in the Dissertation, ch. xi. where I proposed that the assumed Hebrew document should be denoted by \aleph , that the larger additions should be denoted by A, B, Γ , and the smaller additions by α , β , γ . Having examined in ch. xiii. and ch. xiv. the numerous forms, under which the general notion of a common document might be represented, whether one or more of the evangelists made use of the common document in its original language or only in a Greek translation, whether both suppositions must be combined, whether our three first Gospels contain three translations made independently of each other from the same Hebrew document, (as Eichhorn supposes,) or whether some connexion existed between them, whether St. Matthew wrote in Hebrew or in Greek, and finally whether the phænomena are capable of explanation on the supposition of a common document, without uniting other suppositions with it, there resulted an hypothesis, which I delivered in the following words.

"St. Matthew, St. Mark, and St. Luke, all three, used copies of the common Hebrew document α : the materials of which St. Matthew, who wrote in Hebrew, retained in the language in which he found them, but St. Mark and St. Luke translated them into Greek. They had no knowledge of each other's Gospels: but St. Mark and St. Luke, beside their copies of the Hebrew document α , used a Greek translation of it, which had been made before any of the additions α , β , &c. had been inserted. Lastly, as the Gospels of St. Mark and St. Luke contain Greek translations of Hebrew materials, which were incorporated into St. Matthew's Hebrew Gospel, the person who translated St. Matthew's Hebrew Gospel into Greek, frequently derived assistance from the Gospel of St. Mark, where St. Mark had matter in common with St. Matthew, and in those places, but in those places only, where St. Mark had no matter in common with St. Matthew, he had frequently recourse to St. Luke's Gospel*." P. 9.

Having, in the discussions which follow, repelled the four principal charges, which had almost brought his hypothesis to a final condemnation, with that sagacity which is our author's peculiar characteristic, after adverting, in the note below†, to his

* This form, I added, "relates only to the Hebrew document, which was used by all three evangelists. But beside this common document, there was another used only by St. Matthew and St. Luke, of which more will be said hereafter."—This supplemental document I denoted by β . It was a Γνωμολογία, containing a collection of precepts, parables, and discourses. See Dissertation, p. 202.

† As my adversary complains in his Reply, that I did not fairly represent his notions of inspiration in my Answer, I beg leave to add a few words more, to vindicate myself also from this charge. In his Remarks, p. 14, speaking of the apparent contradictions in the Gospels, or as he himself termed them, "*differences in the minute circumstances attending upon the facts*," he gave the following solution of them. "The evangelists therefore were left in such to their *own* recollection, and to the common variations of memory amongst men." These are his own words, and I beg the reader to attend to those which I have marked in Italics, that he may be enabled to judge whether I was correct in saying to my adversary (p. 16) "You allow therefore, in certain cases, an absolute suspension of supernatural aid." Again, "if we admit that the same evangelist was inspired in some cases, but not in others, if we say that in one place he was exempted from the danger of mistake, but abandoned in another to his *own* recollection, &c." Further, "if in those cases where we are pressed by our adversaries, as in the case of apparent contradictions, we assert that the evangelists were left to the common variations of memory, &c."—In the two last sentences I used the very words of my adversary, in saying "*own recollection*" and "*common variations of memory*." I used indeed "*abandoned*" instead of "*left*:" but the words are perfectly synonymous. Notwithstanding all this, he says in his Reply, p. 63, "I mean myself an inspiration continually operating, so far as was necessary, a continual superintendence; not, in some cases, and not in others, but being equal and constant throughout." How he can reconcile his commentary with his text is more than I am able to comprehend. How an inspiration which left the evangelists, in the cases of apparent contradictions, to their *own* recollection, could be an inspiration continually operating, an inspiration equal and constant throughout, is absolutely inconceivable. But he has a curious argument to prove that his notions of inspiration are the same with mine. Alluding to the observation, that he allowed in certain cases an absolute suspension of supernatural aid, he says that the words which I quoted from bishop Warburton, approving of them, and subscribing to them, ("*viz. that the Holy Spirit operated on the sacred writers with a suspended hand*") amount to the same even in expression. In this representation of the words of bishop Warburton, my adversary has omitted a very material clause "by watching over them incessantly." He has likewise converted (as we have seen that he has done before) a relative proposition into an

adversary's inconsistencies on the head of INSPIRATION, he proceeds to examine the truth of his hypothesis, having first pointed out the test by which it must be tried, and removed the obstacles which the remarker had thrown in his way—which we will venture to assert he has satisfactorily done, to the utter confusion of both his adversary and his adversary's abettor—he enters on the primary and fundamental considerations:—

1. Are the phænomena true?
2. Will the hypothesis solve them?
3. Will any other hypothesis solve them?

As not one of these questions was proposed in the Remarks, it was inferred by Mr. Marsh that the truth of his hypothesis is no more affected by his antagonist, than if he had never written. To this objection, however, the remarker replies—'I hold Mr. M.'s hypothesis to be radically faulty, and therefore that it is superfluous labour to scrutinise the particulars.' But, notwithstanding the abundant wisdom evinced in this reply, and which the distich on *Hargrave** no doubt suggested, this remarker, toward the close of it, ventured to scrutinise some particulars, with a view to the defence of his own hypothesis. Ten examples were accordingly produced by him, to show that two very remarkable phænomena in the verbal harmony of the Gospels were false: but, instead of succeeding, and thereby doing away a very material argument by which his hypothesis is otherwise confuted, and Mr. Marsh's is confirmed, it is here shown, that, out of these ten examples, *not one* is to his purpose, and that, should they be false, they prove nothing, or prove against himself. Mr. Marsh, therefore, very pertinently adds, 'since I know of no other person who has called any of the phænomena in question, there is no necessity for any further defence of them.'

In respect to the second inquiry—Will the hypothesis of Mr. Marsh solve the phænomena?—his adversary has not ventured to answer in the negative, though he has endeavoured to

*absolute one, by omitting the little word so. Warburton says "by watching over them incessantly, but with so suspended an hand, &c." whereas my adversary represents him as saying "the Holy Spirit operated on the sacred writers with a suspended hand." This curtailing and garbling of passages so as to alter the meaning of them is unpardonable. Besides, even had he been correct in his representation, his argument would have been a quibble at best. When I said that he allowed in certain cases an absolute suspension of supernatural aid, it is evident from the use of the word "absolute" that I meant a total cessation of it in those cases. But the whole of Warburton's description is allegorical: when he used the participle *suspended*, he used it in the sense of *uplifted*, but ready to interpose at every instant when there was danger of error. The hand only was suspended: the attention was always awake.' p. 38.*

* Lie still, if you're wise.
You'll be d . . . d, if you rise.

introduce some *other* difficulties which he *thinks* are incompatible with Mr. Marsh's hypothesis: but the latter observes, that 'these trials of the hypothesis, by any thing rather than by its *proper* test, afford strong ground for suspicion that my adversary himself knows, when it is tried in this way, that it is too successful.'—Besides, both himself, and his abettor in the British Critic, affect to scout the hypothesis, for the very reason that it solves the phænomena; though the latter adds, with a happy consistency, 'it cannot, we think, be allowed that the solution thus gained is *easy*,' because, 'without the short-hand marks, which the author has borrowed from algebra, it would scarcely be capable of explanation.' To this Mr. Marsh replies,—

'I readily admit that the whole process is abstruse and difficult, indeed so abstruse and difficult, that superficial readers will never comprehend it. But the fault does not lie with me: it is the subject itself, and not the mode of treating it, which occasions the difficulty. The solutions in Newton's *Principia* are certainly not easy, especially to superficial mathematicians. But are these solutions therefore false? Cases indeed may occur, where two solutions may be given, and both of them equally just. In such cases, if the one is easy, but the other difficult, we should generally prefer the former. But we have no such choice in the case in question: for there is only one solution of the remarkable appearances in the verbal harmony of the Gospels, which can be true. The solution of these appearances must be obtained by the assumption of certain facts; and if it be true, that they were occasioned by one set of facts, it cannot be true, that they were occasioned by another. For instance, my adversary maintains the facts, that St. Mark and St. Luke derived the materials of their Gospels from mere verbal communications with the apostles: but I assert, that at least the principal part of their materials was derived from written communications. If the latter fact be true, the former cannot, and *vice versa*. Again, my adversary assumes the facts, that the apostles used to repeat in Greek the discourses of Christ, which had been delivered in Syriac; that the evangelists were present at these Greek repetitions, and thus heard them delivered in the same Greek words. From the assumption of these facts he explains the verbal harmony of the evangelists. I, on the contrary, do not assume these facts, but I assume the fact, that the Greek translator of St. Matthew's Hebrew Gospel derived, in his translation, frequent assistance from the Gospels of St. Mark and St. Luke; and I maintain that this fact occasioned the frequent verbal agreement between the Greek Gospel of St. Matthew, and the Gospels of St. Mark and St. Luke. If this agreement was occasioned by the *fact*, which I assume, it could not have been occasioned by the *facts*, which my adversary assumes. The case in question therefore is not like the case of certain problems, of which two or more equally true solutions may be given, and where we have the choice of that, which is the most easy. If my hypothesis solves all the phænomena, and if no other hypothesis does solve them, the circumstance, that the process of solution is sometimes difficult and abs-

truse, is no argument against the truth of the hypothesis. Besides, though the solution may be difficult in one respect, I deny that it is difficult in another. The whole process is so far difficult, that it requires unremitting attention, together with some clearness of comprehension, to understand it. My object was not to give a mere vague account, or to describe only in a general way the cause or causes, which operated in producing the effects to be explained: nor did I think it satisfactory to speak of those effects, without inquiring into every particular relating to them. Had I been contented, like my adversary, with explaining the bare fact, that the evangelists do frequently agree in words, the process would have been as short and as easy as the British Critic himself, who approves of my adversary's plan, could have desired. But what man, who deserves the name of critic, would think of stopping here? Could he possibly neglect to take likewise the modes of agreement into consideration, and to investigate the numerous and remarkable appearances, which the verbal harmony presents to us? Could he neglect also to investigate the phænomena in the contents and the arrangement of the Gospels? But all these things were not to be done without an analysis of the most minute kind. And as the author was obliged to bestow on it immense labour and intense thought, the reader must not expect to understand it with as much ease, as he would understand a mere general description, a description, which cost no labour to the author, and in which no particulars whatever were taken into consideration. As well might a man expect to understand Newton's *Principia* with the same ease as an *Orbis pictus*. So far the process of solution is attended with difficulty. In other respects the solutions, in general, may justly be denominated easy. It must surely be granted that an assigned cause affords an easy solution of an effect to be explained, if, when the cause is understood, it is obvious, that such effect must result from it.' p. 96.

From this discussion, we wish we could follow Mr. Marsh in examining the difficulties brought forward by his adversary: but, for these, every reader interested in the subject will thank us for referring him to the work.

In respect to the last question—'Will any other hypothesis solve the phænomena?'—Mr. Marsh answers, 'that no *other* hypothesis *hitherto proposed* will solve them, I have proved in the Dissertation (ch. viii, ix, x); and neither my adversary, nor the British Critic, has objected to any thing which I have there advanced.

'As to my adversary's hypothesis, it solves none of the phænomena: it is calculated merely to assign a reason for the simple fact, that the evangelists sometimes do agree; but for their peculiar modes of agreement, for which it is likewise necessary to assign a cause, it assigns none whatever. And even the simple fact that they sometimes do agree is explained by it very imperfectly: for the hypothesis is confined to the discourses of Christ, and leaves the many instances of verbal agreement between St. Matthew and St. Mark in the narrative wholly destitute of explanation. It is equally defective with regard to the phænomena in the contents and arrangement of the Go-

spels, for which it no more accounts, than it does for the phænomena in the verbal harmony. The British Critic himself admits, that it will not solve every particular: and this admission alone is sufficient to condemn it: for the true hypothesis, whatever it may be, will certainly explain them all. If then my hypothesis really does solve all the phænomena; if all the other difficulties, which the ingenuity of my adversary has been able to devise, can likewise be solved by it; and, if no other hypothesis, hitherto proposed, can solve all the phænomena, or remove all the difficulties, what other inference remains than, that my hypothesis must be adopted? P. 123.

In reference to the suggestion, that, 'though no other hypothesis than our author's *hitherto* proposed can solve all the phænomena, yet such a one may be hereafter discovered,' Mr. Marsh observes that two *different* hypotheses, when the phænomena in their full extent are considered, will *hardly* be able to solve them. But it is not on the present occasion the mere process of solving the hypothesis by the phænomena; for the process itself is to be examined by which this hypothesis was obtained.

'Though in the solution of the phænomena it was treated as something assumed, in order to explain them, it was in reality the result of previous investigation. I neither stumbled on it by accident, nor adopted it at random: but I was regularly conducted to it, and by a clue, which could hardly lead to falsehood. The proposition, that our three first evangelists must either have copied, the one from the other, or that all three must have drawn from a common source*, has been admitted by all parties who have engaged in the controversy about the origin of the Gospels. But I proved in ch. viii. that the former could not be true. There remained then only the latter supposition, that of a common source. This common source must have been either Greek or Hebrew. But I shewed in ch. ix. that it could not be Greek†. The evangelists therefore must have drawn from an Hebrew source; and that Hebrew source, as I shewed in ch. vi. could not have been a mere oral, but must have been a written document. In ch. xiii. I examined the various forms, in which the hypothesis of a Hebrew document may be represented, when it is assumed, that St. Matthew wrote in Greek. I found, by the rules of combination, that there were seven general forms of this description, reducible again to particular cases: but that none would solve the phænomena. Consequently we were reduced to the hypothesis of a common Hebrew document, involving the supposition that St. Matthew wrote in Hebrew. The inquiry therefore was now brought into a very narrow compass: and that narrow compass was rendered still narrower in ch. xiv. by the examination of the several forms, which the hypothesis might still assume. Five of them were found wholly incapable of solving the phænomena. The sixth and last form, to which I came, was that very hypothesis, which I

* • Even my adversary allows a common source, though he does not allow that it was a written one.

† † The arguments there used may be applied, not only to authors using a written Greek document, but to authors recording in Greek what they had heard in Greek.

proposed in the Dissertation, and which I have here endeavoured to defend.

* I did not speak therefore without some foundation, when I said, at the close of the inquiry, that "no other hypothesis can solve all the phænomena." The British Critic indeed (p. 181) pronounces it "an assumption of extravagant boldness:" but if the reviewer will have the goodness to examine those chapters of the Dissertation, to which I have referred in the preceding paragraph, he will find that, so far from its being "an assumption of extravagant boldness," it is no assumption at all. It is an inference deduced from a continued narrowing of the inquiry, and from a constant reduction of the possible forms, in which an hypothesis on the origin of the Gospels may be represented. It is useless therefore to urge, (as the British Critic does in support of his rather harsh accusation,) that imagination is inexhaustible in forming hypotheses: for in the present case imagination is nearly, if not wholly, exhausted. If any choice is left, it must lie within a very narrow compass indeed: and though future inquiries may perhaps lead to some modification of the present hypothesis, yet that long and minute investigation, from which this hypothesis resulted, leaves little hope of discovering one of a different description. And when to the inference thus deduced from the analysis which preceded, we add the result of that solution, which followed the hypothesis, our expectations of ever finding another, which will answer the same purpose, are reduced almost to nothing*.

* * I lament, that I have been under the necessity of defending myself against the attacks of the British Critic: and I lament it the more, as one of the editors is an old friend, to whose Review I have myself occasionally contributed. With the gentleman, who drew up the article, in which my hypothesis has been censured, and that of my adversary approved, I have no acquaintance. I trust however, that if, after reading the present work, he sees occasion to alter his opinion, he will have the justice to acknowledge it. The official authority of a review does not admit of much concession: and therefore I wish that the controversy had not been taken up in the British Critic, till the present work was ready for publication. Of my intention to write it, I gave notice, in person, to the editor above alluded to, at the beginning of last December: and I of course expected, that the controversy would not be brought forward, and a final decision made on it, till this rejoinder, which had been formally announced, was likewise before the court. But, contrary to my expectation, and contrary to common justice, the controversy was brought forward in the review for February, and my hypothesis was condemned, without either regard or reference to my expected defence. And this have to close the account of the controversy, while it was still pending, is the more remarkable, as the Dissertation on the Gospels, the very work, to which the controversy related, had been left unreviewed in the British Critic at least a year and an half from the time of its publication. If the reviewer had waited a little longer, and seen the minute examination, which has been given of my adversary's Reply, it is possible that he would not have said (p. 183) the anonymous antagonist of Mr. M. "shows in some very remarkable instances, that the fondness for his hypothesis has obscured the sagacity of that writer." The only instance which the reviewer has alleged, (but which he has alleged twice, and alleged in the spirit of my adversary, as if it were a matter of such importance, as to affect the issue of the controversy) is Justin Martyr's *Apology*. But whatever obscurity may prevail in my reasonings on this subject, on which more will be said in the Appendix, it is impossible that *fondness for my hypothesis* should have been the cause: for the hypothesis stands in no need whatever either of Justin or his Memoirs, as I have shewn in the first part of this work, where the purpose also is explained, for which those Memoirs were introduced. What the other remarkable instances are, in my adversary's Reply, I know not; but this I know, that it contains neither an example, nor an argument, relating directly or indirectly to the truth of the hypothesis, which has not been examined and, unless I am greatly mistaken, *confuted* in the present work. I hope therefore that the learned censor will here-

'Lastly, even if another and a different hypothesis may be discovered at some future period, which shall likewise solve all the phenomena, yet this possibility affords no reason, why the only hypothesis which now solves them all, should not be admitted, till such possibility is realised.' p. 125.

We now come to the *Appendix*, which is divided into three sections, the first containing *Observations on the ten first Pages of the Reply*; the second, *on borrowing Materials, and using them unfairly*; and the third, *on Justin Martyr's Απομνημονευματα των Αποστολων*. The length to which this article has extended, makes it impossible for us to enter particularly into these discussions: but we earnestly recommend them to the attention of our readers, as being not only essential to the merits of the controversy, but to the subject itself, abstractedly considered.

In our review of the Remarks, when first published, we took occasion to offer some observations respecting inspiration; and, but for the extent of this article, we should have resumed that topic, the remarker having, without the slightest correction, republished his crude, indefensible, and (if we may adopt his own style of expression) *dangerous* notions concerning it. We wish Mr. Marsh had entered more decidedly on the subject; for, however respectable the names are which he cites as concurring with him, good reasonings are of more validity than great authorities. The substance, however, of the sentiments referred to, Mr. Marsh has thus judiciously condensed: That—

'—the manner, in which I suppose the evangelists to have composed their Gospels, leaves unlimited scope to the operation of divine inspiration, as it is above described, is too obvious to need an explanation. It admits a never-ceasing superintendence of the Spirit to guard the evangelists from error. If any inaccuracy had been made in committing to writing the document or documents, from which they derived their materials, they were enabled to discover and to correct it. And with respect to the matter, which each evangelist has peculiar to himself, which in the Gospels of St. Matthew and St. Luke is very considerable, the evangelists were directed in the choice of that matter, and enlightened to judge of its truth and importance *.' p. 33.

after view both the hypothesis and the author of it in a more favourable light. But if he still persists in his opinion, I must endeavour to comfort myself with the reflexion, that the same critic, who thinks that I am *obscure*, thinks also, that my adversary is *acute*.'

* * As we have not particularly noticed the publication of the first volume of the BISHOP OF LINCOLN's *Elements of Christian Theology* in its detached state, we avail ourselves of what is said by Mr. Marsh in reference to it, for our own opinion of the work.

"The general observations made upon the nature of inspiration, in treating of the canon of the Old Testament, are to be considered as applicable to the books of the New."

—As the first volume of this work, which is printed separately, as a general introduction to the Bible, relates to a branch of theology, which has been my peculiar study, I embrace the present opportunity of delivering my opinion of it. It is the result of extensive reading; the materials of it are judiciously arranged; the reasonings in it are

Expecting the publication before us to close the controversy, we cannot take our leave of it, without observing that it has been the occasion of bringing forward a most valuable acquisition to the Christian world, and which cannot but be received as such by all who have the best interests of Christianity at heart.

ART. VI.—*The Method of educating the Deaf and Dumb: confirmed by long Experience: by the Abbé de L'Epée. Translated from the French and Latin. 8vo. 6s. Boards. Cadell and Davies.*

LANGUAGE cannot sufficiently exalt the merits of those who thus open the stores of intellect to beings who, from misfortune, have the usual avenues by which they are conveyed incurably closed. Were the chief benefit only to enable them to read and understand, it would not be inconsiderable; but they can converse: they can both comprehend and reply. They can be instructed by a lecture; they can be entertained by a comedy, and animated by a tragedy, hurried away by all the illusions of a theatre, as completely as others who can hear. If speech be the gift of reason, a power of this kind must be considered as its choicest treasure; and we less wonder how the end is attained, than that it should ever be thought attainable. Yet it is not a new art, though rendered more perfect by practice, improved by reflexion and inquiry. It was first attempted by Peter Ponce, a Benedictine monk, about the end of the sixteenth century: but he left no memorials of his efforts; and, what we know of his success, we learn chiefly from Valesius in his tract 'De sacrâ Philosophiâ.' The first author on the subject was Bonet, who taught the younger brother of the constable of Castile, and published an account of his art in 1620. He was followed by Helmont in 1657, who, however, taught one pupil only; and, in 1690, by Amman, who has left his improved observations on the subject, in his well-known treatise 'De Loquelâ,' published in 1700. Dr. Wallis, whose extensive and philosophical views are well known, attempted, with success, to instruct Mr. Whalley, a young gentleman of Northampton; and afterwards a son of admiral Popham. He continued to instruct the deaf and dumb, but without attempting to teach them to speak. The principle of his method is laid down in his 'Tractatus procœmialis de Loquelâ, sive de Literarum omnium Formatione et genuino Sono.' The tract, 'On his Me-

clear and solid; it is well adapted to the purpose for which it was intended, as a manual for students in divinity; and it may be read with advantage by the most experienced divine.'

thod of instructing Persons Deaf and Dumb,' was published in the Philosophical Transactions for 1698. Dr. Holder, who nearly at the same time made a similar attempt, is said not to have been equally successful. His method is greatly elucidated in his 'Elements of Speech,' published in 1690.

Another author, Delgarno, has considered the subject rather as a philosophical speculation, than a practical science. His little work, entitled 'Didascalocophus, or the Deaf and Dumb Man's Tutor,' is said to be a performance, 'learned and acute, profound and rational.' Some other works, of a more loose and general nature, are also mentioned in this introduction, one by a Dr. Bulwer, a physician, in 1648; and another, which bears the—perhaps fictitious—name of George Sibscota, in 1670.

Various have been the instructors of the deaf and dumb in the last century. In Paris, father Vanin and M. Perreire; in Leipsic, M. Heinich: in Edinburgh, Mr. Braidwood: in London, Mr. Baker. These, however, have not always been authors; and the abbé de l'Epée alone, in the latter period, has explained his method. His fame has been extended by means of the stage; and it appears that he was an enthusiast in the cause of benevolence—another Howard, alleviating the misfortunes of the innocent and the virtuous.

'Mons. de Bouilly relates that the Russian ambassador at Paris made the abbé a visit in the year 1780, and offered him a present in money proportioned to the customary magnificence of the empress. This the abbé declined to accept, saying, he never received gold from any one; but that since his labours had obtained him the esteem of the empress, he begged she would send a deaf and dumb person to him to be educated, which he should deem a more flattering mark of her distinction. A pure and noble disinterestedness breaks out in occasional passages of his writings,

'Not content with the rejection of presents and profits, which he had no wants nor passions to make necessary, his pious and charitable spirit carried him to impart very largely what he had to those whom he considered as the greatest objects of compassion.

'The expences attending the seminary which he established were wholly defrayed by himself. He inherited an income, as M. de Bouilly informs us, amounting to about 14,000 livres, (nearly 600*l.* sterling), of which he allowed 2,000 for his own person, and considered the residue as the patrimony of the deaf and dumb, to whose use it was faithfully applied. So strictly he adhered to this appropriation, that in the rigorous winter of 1788, when in his 65th year, and suffering under the infirmities of age, he denied himself fuel rather than trench upon the fund he had destined them. His housekeeper having observed his rigid restriction, and, doubtless, imputing it to its real motive, led into his apartment forty of his pupils, who besought him with tears to preserve himself for their sakes. Having been thus prevailed upon to exceed his ordinary expenditure about 300 livres, he would afterwards say, in playing with his scholars, "I have wronged my children out of an hundred crowns."

' To distribute in charitable uses a part of the substance with which we are endowed, as it is meritorious before God and man, so there have been in all times and in all countries numbers to entitle themselves to this merit; nor have there been ever wholly wanting virtuous spirits who have used their personal endeavours to sooth the sufferings of misery and plead the cause of the distressed: but for a person to devote the greatest portion of his life and employ all his intellectual powers, with exhaustless patience and unwearied assiduity, in occupations otherwise extremely laborious, tedious and irksome, for the service of his fellow creatures, in order to remove the sad effects of a calamity tending to degrade them to a level with the 'beasts that perish,' and that solely upon principles of religion and humanity, not only with a constant refusal and sincere contempt of gain, but even a profuse dispensation of hereditary fortune, must be allowed to be a more than common ardor of charity; a most exalted height of practical philanthropy. This the abbé de l'Epée did; and this will doubtless justify the grandeur of the tribute paid to his benevolence.' p. x.

The abbé is now no more: but the institution is conducted by the abbé Sicard, who has unfortunately adopted the idea, that, to communicate the faculty of speech, costs more trouble than the attainment merits. Those whom we have heard speak have certainly voices strikingly—almost painfully—inharmonious: but the power of speech is invaluable, were it not one of the criteria which raise man above the brute creation.

In this neighbourhood, we find there is an institution of this kind: but its finances are unequal to the numerous claims. In this charitable age, we could scarcely expect that an object so truly benevolent would be neglected; and we suspect that it is not sufficiently known. The translator's account of this work we shall select.

' Without attempting to prescribe the best or readiest method of this tuition, the following treatise, it is conceived, will enable every person, who is disposed, to become an instructor of the deaf and dumb. It shows the facility of their tuition to be far beyond what is commonly imagined. It furnishes the means. It points out diversity of means: for although it maintains the superiority of methodical signs for that end, it does not preclude the use of every other system or method that may be more convenient; it mentions the existence of other contrivances; and it is minute in the detail of instructions for teaching articulation. Divested of all application to the system of signs, it contains accuracy of knowledge and information, which, to whatever method adapted, or by whatever means conveyed, will be highly useful in the education of the deaf and dumb; which no one will peruse without pleasure, and few without improvement. The abbé de Condillac, a man of great estimation amongst cotemporaries, and whose name is still respected, who had applied himself diligently and successfully to the art of tuition, has mentioned the abbé de l'Epée's method in terms acutely encomiastic. The academy of Zurich, with ardour of sentiment, proclaim that his book is replete with instruction; recommend its system to universal reception; and declare, that all the world would be benefited by it. Thus

the only testimonies of validity that appear, are both in the highest degree favourable to the work.' P. xix.

* It is to be lamented that the Dictionary of Signs undertaken by the abbé de l'Epée, which he mentions to have been considerably advanced, cannot be produced to aid the cultivation of his system. As he did not live to finish that work, the editor, stimulated by a desire of promoting the instruction of the deaf and dumb, as well as of preserving to the world all the literary labours of such a man, made diligent inquiry at Paris concerning the manuscript; but without success.

* Former works upon the tuition of the deaf and dumb are confined chiefly to instructions concerning utterance; containing very little concerning grammar, or the acquisition of knowledge. The abbé de l'Epée's, without slighting the former object, is directed chiefly to the latter, as the more important of the two.' P. xxii.

Our author's method we cannot abridge; nor would this be indeed desirable, were it in our power. From the dispute with M. Heinich, some observations have, however, arisen, which are not uninteresting.

When the emperor Joseph had sent the abbé Storck to Paris, to be instructed in this art by the abbé de l'Epée, and the pupil had returned to Vienna, having obtained full information, M. Heinich at Leipsic publicly declared that the Parisian method was not only useless, but injurious. The abbé de l'Epée then addressed a letter to him, explaining his method to be by natural signs, not hieroglyphic, as Heinich had erroneously supposed; and that, from these, by gradual analysis, adapted to their powers, he led them from sensible to abstract ideas.

M. Heinich, in answer, seemed unwilling to explain his own method, or to discuss the comparative advantages of each. The dispute was referred to several academies: but that of Zurich alone decided. Indeed, as M. Heinich entered into no particular explanation of his plan, the decision could be scarcely pronounced impartial; and the judges were obliged to collect their evidence from oral information, and from publications not always, we suspect, properly authenticated. We perceive, however, that M. Heinich began with teaching his pupils to speak; and abstract propositions were explained by dactylology, or talking with the fingers. This method is undoubtedly mechanical; and, highly as we value the gifts of speech, we would not barter for them the philosophical method of M. de l'Epée, even were it incompatible—which it is not—with oral elocution. The abbé's language is an universal one. His methodical signs express ideas which every person will render in his own language. It was the pursuit of an universal language which led Wallis to inquiries of this kind.—We cannot con-

clude, without our best wishes for the prosperity of the institution, which, were it more known, would undoubtedly be more liberally encouraged.

ART. VII.—*Public Characters of 1801-2. To be continued annually. 8vo. 10s. 6d. Boards. Phillips.*

THE sparks of party, which shone in the former volumes with slight and glimmering coruscations, blaze forth in this with a violence wholly its own. The dog-star rages; and so virulent is the imparted venom, that the whole island of Anticyra will scarcely suffice for the cure. Without a metaphor, the eager intemperate praise of some characters, the glosses, the artful insinuations with respect to actions, which no glare can decorate, or whose nature no colouring can hide, have greatly disgusted us. Were the work to be continued in this form, it would soon be the favourite of the few only, if any remain, to whom treason and massacres are sport.—But to particulars.

The lives contained in this volume are those of—

‘—Right Hon. Henry Addington—Sir Richard Hughes—Lord Spencer—Lord Alvanley—Mr. John Horne Tooke—General Bowles—Marquis Townshend—Governor Franklin—Earl of Fife—Dr. John Moore—Colonel Despard—Lord Sheffield—Mr. Windham—Count Rumford—Rev. Thomas Maurice—General Strutt—Mr. Dawson of Sedberg—Dr. Rennell—Caleb Whitefoord—Dr. Mitchill—Colonel Tatham—Bishop of Lincoln—Mrs Cowley—Dr. Beattie—General Hutchinson—James Martin, Esq. M. P.—Dr. Abraham Rees—Mr. Arthur Young.’ p. iii.

The early life of Mr. Addington is well detailed; but the author is soon agitated in a violent degree by the debates respecting the slave-trade, in which Mr. Addington took a part. We can only now repeat what we said in the early stage of the discussion, that the trade wanted reform, and that, had this point been attended to, the happiness of the negro race, even while it continued, would have been greatly augmented by the change; their minds improved; the feelings of religion, and even humanity (let the affected philanthropist start, if he pleases), expanded; and the whole world have been a gainer.

A more serious charge against Mr. Addington is his adoption of the measures of the preceding administration. ‘The suspension of the Habeas-Corpus act, the feeble cry of conspiracy, and the sealed bags of papers,’ are brought forward with a sneer. Are the evidences at Maidstone, is the confession of O’Connor, are the facts revealed at the conclusion of the former rebellion in Ireland, forgotten? Is there a man—we mean not to include the bigoted adherents of party—who will deny that the salva-

tion of the country is owing to the circumstances thus sarcastically stated: 'Treason was at our doors; and we knew it not, till the seal was opened: the mine was charged, and ready to explode, when the cry of conspiracy gave the alarm.' In other respects, the life of Mr. Addington is detailed with candour; and his conduct in many instances, as speaker, is spoken of with approbation and applause.

A candid dispassionate life of admiral sir Richard Hughes follows; and the biographical sketch of lord Spencer, on the whole, merits commendation. His lordship's early life is advantageously, and we believe justly, detailed; nor does the heaven appear, till some of the whig families, detesting the revolution in France, join with Mr. Pitt. We then again hear of the suspension of the Habeas-Corpus, secret imprisonment—one of the 'worst grievances under the Gallic monarchy,' though slight in comparison with the common grievances under Corsican usurpation, which the French have adopted in its stead. The biographer, however, does justice to the official conduct of lord Spencer, to his private virtues, to his talents, and his learning.

Lawyers seem an apparition as terrific to our author, as secret imprisonment or the slave-ships. Men have sometimes unaccountable antipathies; but a sneer at the law, or a judge distinguished for sound constitutional doctrines, is never omitted. Lord Alvanley began his career in a humble station; but the author should have pointed out, that he did not drudge at the desk of an attorney, nor was reduced to quack, for want of greater progress, the *Propria quæ maribus*. His advancement is said, with a sarcastic slyness, to be owing to his early intimacy with Mr. Pitt, or his connubial connexions; and the opposition of the chancellor of that æra to his appointment is industriously stated. Yet it is properly added, that, in this high office, his character has been unimpeached, and his integrity unquestioned. This praise is again repeated at the end of the life; and it is more to be regarded, as lord Alvanley has committed two heinous crimes—he voted for the gradual abolition of the slave-trade, and supported administration when 'the feeble cry of conspiracy' was first heard.

Of Mr. Horne Tooke, we find it difficult to speak. We highly respect the man, his talents, and his works; yet we must condemn his political conduct, and disapprove of the spirit in which his life is written. The early part of it is by no means exceptionable. In the support of Mr. Wilkes, Mr. Horne Tooke spoke and acted like an ardent young man, with all the generous passions warm in his breast, without, perhaps, sufficiently discriminating the foundation of the cause in which he engaged. The ingratitude of Mr. Wilkes roused his resentment; and all this part of his life deserves commendation. We

find Mr. Tooke, in the American war, an opponent of administration—*idem fecerunt alii bonique*; on the event of the coalition, the friend of Mr. Pitt; afterwards a candidate, twice, for Westminster. The restless spirit seems to have urged him to contest; perhaps—for we highly respect his intentions—a wish to be of public utility; but we cannot always respect the petulance, the levity, the indecorum of his language. The trials for treason follow; and, from what we have said of the temper of the work, we need not speak of the author's style and manner.

The conduct, ability, eloquence, and innocence of this gentleman, when added to his acknowledged worth, his high character, his respectable appearance, and his long, rigorous, and, as it may be now fairly inferred, his unjust imprisonment, produced a marked impression even on his enemies. Many of his friends burst into tears, and even some of the minions of power, forgetting themselves for a moment, testified an involuntary joy at his deliverance. p. 98.

On this subject we shall be concise, but must remark on the inconsequence of the observation, that, if a person be not guilty of treason, he is therefore wholly innocent. Mr. Tooke, by his own account, 'in his journey to Windsor, would stop at Hounslow;' he would not go to the extent of his companions: but is it not some crime *prodire temus*? Is the attempt to conjure up the malignant spirit from its dark abode, innocence? The nation rejoiced at their acquittal, because, by law, they could not be convicted. Had they been tried for misdemeanors, the nation would have felt more sincere pleasure from their conviction.

Mr. Tooke's philologic labours are highly ingenious and interesting. His rejection from the profession of the law, and from a seat in parliament, are not objects of discussion; and, if statutes to this effect exist, it does not become us to inquire why they exist. The incongruous mixture of professions we always disapprove; and experience has shown the wisdom of such statutes; for, where the clergy can be admitted, as in the profession of physic, they have seldom succeeded as scientific or judicious practitioners.

Mr. Tooke is now about sixty-five years of age, having been born either in or near the year 1736. When a young man, he was accustomed to dress genteelly; and as he possessed a good person and agreeable manners, displayed much of the look and mien of a person of fashion. In addition to this, having kept company with people of distinction, and made the *grand tour* twice, it is not at all surprising, that his conduct and behaviour should exhibit the model of a finished gentleman. Of late years he has left off powder, and this circumstance adds not a little to the appearance of age, in consequence of that venerable idea which grey hairs are always calculated to inspire;

he is still remarkably clean and neat in every thing respecting his person.

No man in this country is better calculated to shine in company. So various are his powers, that he can either convey information to a society of philosophers, and throw new lights on every subject introduced, for the purpose of discussion; or he is able to fascinate a brilliant circle with his wit, and set the convivial board "in a roar" by his merriment. Nor is it to one sex that the idea of his excellence is confined: the ladies are far from being insusceptible to the charms of his conversation; he is capable of all the little attentions that captivate the female world: he exhibits that decorous good breeding that bewitches even virtue, and in his respectful conduct to the sex, still keeps up all that is amiable in the *old*, while he avoids every thing disgusting in the new school.' p. 115.

The life of general Bowles is highly interesting and eventful: it resembles a fabricated novel, rather than a real biography; but, if we except a little eager admiration, it is, we believe, faithful. He is still at the head of many Indian nations; the determined enemy to Spain, and the friend of England; the self-taught warrior, legislator, chemist, and philosopher.

The account of the marquis Townshend is also faithful, without any very striking bias. His lordship is suffered to join the coalition without incurring disgrace, and to vote for the American war, with the saving clause that the biographer has 'every reason to think he would on no account have been employed in the trans-Atlantic continent.'

William Franklin, late governor of New Jersey, has not a title to much of our regard. He was the son, according to our author, 'of the great Franklin, a name equally dear to Europe and America.' We fear the biographer has spoken more truth than he intended. In America, the name is not highly respected; and, in England, even the partisans of the American war have discovered, that admiration had too largely magnified his talents, and, in some measure, his integrity. In short, the governor, introduced for the sake of the eulogy on the father, is a worthy, respectable, and honourable man.

Lord Fife, the benefactor of his country, is described with great energy and elegance of language. Indeed this little sketch is admirably written; and we have no reason to impeach its justice. It is sullied, however, by two or three passages of gross illiberality; nor will any difference of opinion justify language scarcely raised above vulgar abuse. We will not disgrace our work with the repetition, but refer to pages 211 and 212. Lord Fife has greatly improved the country round the Moray Firth, and is, in every view, we believe, highly respectable; but we doubt whether he do not owe his present introduction to his having opposed the late administration.

Dr. John Moore has occurred to us on so many occasions,

we have followed him so frequently in his varied walks, that nothing can be added to our estimate of his talents and knowledge. The events of his life are well detailed, and the sketch is written with elegance. The circumstances are too minutely described, to be free from the suspicion of their having been communicated by at least a particular friend.

We will not insult the biographer by contrasting the account here given, the whining lamentation of the 'long and cruel imprisonment' of colonel Despard, with the event. His best friends must wish that he had been longer 'cut off from all intercourse with the community,' since he so little merited indulgence. He appears to have been an able and active officer. His services were chiefly confined to the Mosquito shore.

Lord Sheffield is a character of no common mould. Spirited, enterprising, ingenious, and philosophical, he combines theoretic observations with practical inquiries. We mean not to commend him in every step of his conduct; but the principal parts are highly honourable to his judgement and diligent inquiry. His life is somewhat extended and circumstantial in what respects his public conduct; but is sullied by the editor's usual mischievous insinuations. There can be nothing more base or unfounded than the following passage:—the author is speaking of the riots in 1780.

It has indeed been supposed, but with what justice we are unable to determine, that the grand question of parliamentary reform, agitated about this period, contributed not a little to the relaxation of all authority, both civil and military, and that the premier of that day, who was the sworn enemy of popular election, was not totally averse from exhibiting a specimen of popular anarchy! p. 265.

It is in this manner the poison that has devastated kingdoms has been disseminated: by these dark hints and suspicions, the best characters have been undermined; and an abuse of liberty of this kind must ultimately tend to its destruction.

Mr. Windham's life is written with temper and impartiality; and its author is neither animated into flame by this gentleman's arguments in favour of the slave-trade, nor his violent support of the war with France. So cool is he, at once, that even the phrase of 'acquitted felons' ceases to move him. The account of Mr. Windham's public conduct is full and satisfactory; and, in private life, the biographer allows him 'great learning, much general knowledge, and a happy choice of words.' 'He is warm,' it is added, 'in behalf of those whose interest he espouses, steady and sincere in his private friendships.' As secretary at war, his conduct was liberal and exemplary.

Sir Benjamin Thompson, count Rumford, is the next on the list; a man whom every party is eager to praise, and whose active energetic mind has added to the comforts and conveniences

of every class of the human race. He was a native of New England; and, in the American contest, took the side of the parent country, whence he entered into the service of the elector of Bavaria. His first great effort was to relieve the inhabitants of Munich from its crowd of beggars; but we wonder that our author does not take fire at this infringement of liberty; for we know not why the beggar should be removed from his *native* haunt at the church door, more than the African from his native coast. One of the great grievances of each is, that he is compelled to work when he would willingly be idle. Count Rumford's philosophic career we have carefully followed and need not repeat; but we were surprised at the manner in which the French National Institute is brought forward.

* In the establishment of her National Institute, France exhibited a gigantic superiority, in respect to human intellect, and by concentrating in one common focus every thing respectable either in the sciences or *belles lettres*, exhibited such a blaze of genius as had never been beheld before in Europe*.

‘We appear to be successful in mimicking the name alone, for to have rivalled the establishment (if it were possible to rival it!) it would have been necessary, to have called forth the exertions of every man among us conspicuously eminent in mathematics, practical astronomy, oratory, natural and civil history, painting, poetry, music, &c. &c.

‘To have rewarded these, parliament should have provided ample salaries, and to have prevented the whole from dwindling into a ministerial job, the members ought to have been elected by ballot.

‘Instead of this a puny imitation was adopted, and one professor only appointed; true it is, there are few men in the kingdom who could have been selected perhaps with greater propriety, or who possess more various powers than the gentleman in question†; it is the inefficacy and nullity of the plan only that is here arraigned, without intending to throw the slightest blame on the original projector, who was perhaps cramped in his views, and impeded in his exertions.’

P. 337.

The ignorance of this passage can only be equalled by its malignity. ‘By their fruits you shall know them;’ and the editor needs only to look at *their* fruits‡. Of Dr. Garnett, it would be improper now to speak; but he was certainly not the high character in philosophy which the author wishes to represent him.

The life of Mr. Maurice is neither connected with administra-

* As a proof of this the old members of the Academy of Sciences, (esteemed the first in Europe during the monarchy) constitutes only class I. of the National Institute.
—Editor.

† Dr. Garnett, a man of considerable eminence in the philosophical and literary world.

‡ See the Analysis of Memoirs of the National Institute, continued in many of our late successive Appendixes.

tion, the 'slave-trade,' cruel imprisonment, nor the National Institute. We may therefore expect some impartiality, and we find it. The author does not offer any criticisms on his works; and indeed, in critical inquiries, he general fails. As they have, however, been considered in the order of their publication, in our journal, we shall not again enlarge on the subject. We think very highly of Mr. Maurice's taste and knowledge, though, in some points, we differ from him; and we wish, with his biographer, that the rewards of his services, in the cause of literature, had been more ample.

The life of general Strutt is not particularly interesting. He is certainly an able and an active officer; but we see so many marks of design in the present work, that we suspect he is introduced to convey an eulogium on Lord Moira, whose character is too well established to require the aid of such little artifices.

Mr. Dawson, of Sedberg, is a self-taught mathematician, philosopher, and metaphysician; and one of the greatest advantages of a work like the present, is to bring forward singular and unregarded merit. Few have heard of Mr. Dawson; and yet, if this account be entitled to credit—and we see no reason to distrust it—his merit deserves to be known in a more extended sphere. His correction of the conclusion from professor Stewart's 'four propositions' respecting the distance of the sun, appears to be highly acute and judicious. The arguments which he deduces against the doctrine of necessity are peculiarly ingenious, though not perfectly satisfactory.

Of the life of Dr. Rennell we can say little. The period when he is to be considered as a combatant in the fields of controversy was not, at the time of the publication, arrived; and we must not travel out of the record. He is represented, we believe justly, as a most religious man, an excellent divine, and deeply impressive preacher.

Mr. Caleb Whitefoord is a man who has prolonged the life of many, if cheerfulness and good humour have, as is commonly supposed, an influence on the health. From the period when 'Cross Readings' were introduced, his lively talents have been constantly engaged; and the 'Foundling Hospital for Wit,' with many similar collections, has been greatly enriched by his efforts. We are happy to hear that he possesses a good constitution, and an uncommon flow of good spirits. May such men often engage the attention of our biographer; for Mr. Whitefoord's good humour seems to have lulled to sleep his malice, and spread round him a glow of benignity.

Dr. Mitchill leads the author to a general notice of the American literati—those who laboured in the great work of the revolution, as well as those who succeeded them. Dr. Mitchill himself is a legislator, a chemist, and a physician. His doc-

trine of *septon* is warmly praised; but of the author's scientific talents we have offered sufficient specimens, while speaking of the National Institute of France.—Colonel Tatham is another American of superior talents. The events of his life, in his various journeys through the American continent, and in the back settlements, are so minutely detailed, that Eo, Meo, and Arco, must have attended every step, and dictated to the biographer. His journey to Spain, and its object, are related very obscurely, and would require a comment which we cannot supply: we can collect nothing from the '*following premises*.' In his various labours as an engineer in this country, we have had occasion to praise his diligence and his talents.

The life of Dr. Prettyman follows, in one continued strain of panegyric. It has certainly strayed from its destined work; and the careless compositor, not knowing for what book it was designed, has placed it here. Never was a more unfortunate blunder!—the keeping of the picture is wholly destroyed.

The short account of Mrs. Cowley is elegant and characteristic; but the author's praises are much too highly coloured; and though, in the serious pieces, he 'hints a fault, and hesitates dislike,' the whole is too warmly panegyric.

The life of Dr. Beattie is a correct and elegant performance. With the biographer, we must blame his contempt of Mr. Hume; and, in general, we do not think highly of his Metaphysics. Hume was a giant, with whom all were afraid to contend; and to attempt to sling the stone, which, though it fell *ineffectual*, did not fall *noiseless*, was considered highly meritorious. His latter days were embittered by the loss of two highly promising sons. The feelings of the biographer confer credit on his heart; and he did well to add a short account of the elder, from the sketch offered to the public by the affectionate parent. It may be partial; but such partiality, should it be so, is more attractive to the heart than truth. No one is injured by such errors; and the heart of the reader may be softened and amended.

The leading and most distinguished part of general Hutchinson's life has often engaged our attention. The earlier years of this accomplished officer were spent in accumulating knowledge. The active scenes of warfare did not engage his attention till the first expedition to Holland, under general Abercromby. In his civil polemics, we find him a warm friend of catholic emancipation and of the union.

Mr. Martin is a respectable member of parliament, and almost a constant supporter of opposition.

Of Dr. Rees, the account is comparatively short; but it contains the history of dissenters in the true style of a dissenter. We mean it not opprobriously, but as characteristic. To those accustomed to their writings, no other distinction is necessary.

The life of Arthur Young is extensive, critical, and discriminated. We think highly of this gentleman, but cannot subscribe to every part of this warm panegyric. To examine minutely, would lead us too far, so that we shall dismiss with general commendation. Of the common temper of the work, we can say nothing favourable: some parts of it, however, are pleasing and satisfactory.

ART. VIII.—*A non-military Journal, or, Observations made in Egypt, by an Officer upon the Staff of the British Army, describing the Country, its Inhabitants, their Manners and Customs; with Anecdotes, illustrative of them. In a Series of Letters. Embellished with Engravings. 4to. 1l. 1s. Boards. Cadell and Davies. 1803.*

EGYPT is a theme almost exhausted. We have accompanied the conquered and the conquerors; we have been alternately witnesses of defeats and triumphs, of splendid discoveries and exaggerated descriptions. We now descend to private life, to the minuter details of the inhabitants—we had almost said of the *men* who inhabit the country, but that their powers, both mental and corporeal, sink almost below the standard of human nature. This degradation is partly the effect of modern oppression, of treatment the most savage and brutal; but we have often had occasion to observe, that the native Egyptians never soared high in the scale of intellectual attainments, or of heroic prowess. Victims of the natives of the Arabian coast, of Ethiopia, and the shepherds in ancient times, they have had few brilliant epochs, though the number of such periods has been multiplied by their admirers, their splendor exaggerated by the partial historian. No difference of opinion, however, occurs as to their present state: to every eye they appear sunk, dejected, despised. Our author, who writes in the lively Shandean style, gives the following account of the work, in his preface addressed to the '*Courteous Reader.*' After professing to leave military details to colonel Anstruther and sir Robert Wilson, he adds,—

'However, resolved that you should know something of the *carte du pays*, I present you with the following letters, having left out every thing military, as I imagine it may be *more* suited to *your* inclinations that my pen should be supplied with simple ink, rather than dipped, like that of Draco, in blood—for I shrewdly suspect *thou* art of a mild and pacific disposition. One advantage you will have over the writer is, that of accompanying him, without partaking of his fatigues and privations; and *certes* you will not have a sleepless night, as he thus kindly presents you with an opiate.

If by chance you should be able to keep your eyes open, and will follow him in his peregrinations, he trusts, at least, you will not find him a splenetic traveller.

In sober seriousness, this trifle (written by a soldier who aims not at literary fame, who never had an idea of making it public, and intended it but for the eye of a partial friend,) will not, I hope and entreat, be judged with the severity of criticism. It has not even been altered from its original form: "*Tant pis*," perhaps you will say: however, you must do with it as the author has done with his correspondent—"take it for better for worse." P. 7.

After a tedious voyage, the languor in consequence of a wound, and the unvarying prospect of the desert shore, our author speaks with rapture of his passage up the Nile, and the prospect of Rosetta. In fact, it has been the good fortune of Egypt to be approached on all sides by desolate sands, or inhospitable shores: and we have often thought that the warm, the exaggerated, praises of the country have been partly owing to this circumstance. The account of Volney, a description which was unjustly asserted to have been written in a garret in London—an injurious report, that we were among the first to combat—is now believed to be very faithful. Would that he had never been employed in a worse labour! The prospect of Rosetta is pleasing: the internal view less so.

After this digression I must back again to Rosetta, the interior of which, I confess, ill accorded with the idea I had formed of it while in the boat, or from what I had been taught to expect by Mons. Savary. The poverty and wretched appearance of a ragged multitude that swarmed round me upon landing, and the filthy condition of the streets, gave no favourable impression.

The Christian inhabitants, the Jews, some few European Turks and Greeks, speak a *lingua Franca*, which is, at least, a very accommodating language, if not a very pure one. These poor Christians, from the constant terror in which they live, and the system of tyranny and oppression exercised upon them by the true believers, (Musselmén,) have dwindled into a race of the most despicable slaves, abject worthless liars, hypocritical knaves and cheats, that exist upon the face of the earth: Jews are said to be so; these Christians I know to be so: their style of dress is like that of the native, distinguished principally by the difference of turban; their manners and customs of smoaking, drinking coffee, lounging crossed legs upon sophas, (called divans,) &c. &c. &c. are those of the Arabs, so that, except in religion, they differ not from the natives.

The poor inoffensive Jew is not less persecuted here than elsewhere; but certainly not more aggrieved than in many, I am sorry to say, much more civilized countries. P. 10.

The houses put me very much in mind of the old houses at Chester, the windows projecting in that kind of way. It is true, one does not find at Chester these windows supported by massive columns of granite and marble, which here one does, but, grievous to tell! so disposed, so ar-

ranged; that though the column itself commands respect, yet you cannot help laughing, or rather crying, to see the order of things so prostituted and reversed; the pillar generally rises from its capital, which, strange to say! in this town, nine times in ten has changed situation with its base. At one side of a door you find a majestic pillar of the Corinthian order, in lovely white marble; on the other side, a miserable broken column of granite, heaped upon, perhaps, two capitals of the Doric order, one over the other: it would seem as if they had found these beautiful remains of antiquity lying in confused heaps, and, without taking the trouble of picking out pairs, had seized upon the first that came to hand, and thrown them indiscriminately up against their walls! I have remarked, that, in the very same street, I could have collected two or three pair of equal dimensions, and of the same order. At this very moment these columns are found lying about the streets, broken and neglected.

Except in a few Christians' houses, and those inhabited by the French, you see no panes of glass; the substitute is a very close wood-work, which effectually hides the person within, which is, I believe, one of their reasons for using it, but it is so much too close, that it makes the rooms very warm, except just at the moment when the sun happens to shine upon the particular window, then its effects are kept out, and the air admitted. The closest grating in Spain or Portugal is open work to this, which, from the scarcity of wood and workmen in Egypt, is a very extravagant, and, I confess, *selon mon goût*, an ugly ornament.

The inside of their houses may be made comfortable; but, from the state in which they live in them, are generally wretched, and dismally uncomfortable: even in the best houses, where, though you find spacious rooms, flagged with marble of various colours, some of them with fountains of water playing in the centre, to keep them wet and cool during the hot weather, glistening with oriental splendour, and all the luxuries that indolence could wish, divans, carpets, cushions to loll upon, &c. &c. &c. yet no one thing in the house bespeaking comfort. P. 12.

Several of the women, particularly the Syrian, are said to be really beautiful, particularly in the mould of the hand and arm. The Christian woman, however, though looked on, by her husband, as a servile animal, enjoys a degree of freedom not known to the poor Arabian female.

The one is suffered to live upon the same floor with her husband, and remains uncovered to her Christian visitors: she, in her turn too, visits. The other inhabits the top of the house, seldom or ever descends to the room below her own, nor dare she sit down at meals with her husband, but attends like a servant, and does all the dirty and drudging work.

Her rooms are called the Haram, into which no male-stranger ever puts his foot. As these rooms, or, more properly speaking, this room, for one apartment suffices for a lady of this clime to eat, drink, and sleep in; as this is her constant prison, it is always fitted up with great magnificence: coloured glass windows round the top of the room; ceiling and walls gilt and painted in very bright and rich co-

lours; the floor inlaid with different-coloured marbles; and the lattice-work of the windows particularly well-carved; the divans, carpets, cushions, &c. &c. the most elegant possible: in the midst of which finery this unfortunate creature exists, like a bird in a cage.

No expence is spared in their apparel; the finest shawls, muslins, silks, pellices, &c. &c. compose the dress, which, according to the wealth of the husband, is covered with pearls, and various stones, diamonds, emeralds, &c. &c. &c.

In the haram, as indeed in almost all their rooms, there is a sort of orchestra, the lattice-work of which is fine, and very close, puts me in mind of the place in the synagogues in which the unmarried women sit not to be seen. I have never been able to find out the meaning or use of this orchestra: some say it is for ornament; others, a place for the women to retire to and loll upon sophas without the fear of being disturbed by visitors: and, again, I have been told, it was for the female singers to sit in, where they might uncover their faces without being seen, which seems likely enough, as there are sometimes steps leading up to it: I am almost led to think it is by way of ornament, and to fill up a certain space, for it is uniformly on the top of an *armoire*, which *armoire* with little pidgeon-holes such as one sees in apothecaries' shops, on each side of it, invariably, in every house, fills up one complete side of the room. One or two of the native women, who, by great favour, remained unveiled during our visit, were rather pretty, good eyes and teeth, and well made, but stupid-looking creatures, without any manner, and seeming not to know what to do with their hands.' P. 19.

The description of the common people conveys such a variety of wretchedness, that we will not impart to our readers the disgust which we felt on reading it: yet we think the picture faithful. The Egyptian women are described as very abandoned: they lived with the French soldiers with little remorse or compunction, and were transferred, for a slight sum, to the English. After such a life of prostitution, the Arabs, however, received them as wives: the Turks were less tolerant; so that the purchase by the English soldiers was as much for the purpose of protecting them from a cruel death, as of procuring companions.

Our author describes the caravanseras, and speaks with grateful respect of the hospitality of the Arabs: but his most glowing colours are reserved for the country, and his journey along the banks of the Nile. His description does not, however, greatly differ from that of former travelers.

By describing one village you describe all; invariably built upon one of these hillocks; an assemblage of flat-roofed square mud-huts; few houses with upper stories or walls of brick; oval kennels of mud, without any window, and only a small hole, through which they creep, and were it not that a hollow is dug about two feet in the sand they would scarcely be able to stand upright in them. The Arab hut, like the "cobbler's stall, serves for kitchen, parlour and hall;" in truth answers every purpose, for they are beastly dirty.

* Almost every house has its pigeon-cote erected upon the roof, in a curious form, and giving a very odd and picturesque appearance to the whole: a mosque or two, according to the size of the village, a number of ragged inhabitants, and a few date trees, finish my description of the Arab village, which, at some little distance, wears the appearance of a fortification, and does in fact afford excellent cover to the guard which is regularly mounted every night by the inhabitants to protect them from the incursions of the Bedouin Arabs. There are three distinct styles of habitation; the best of brick, with latticed windows and upper rooms; the intermediate ones of mud, four walls forming a square, with flat roof, and holes in the wall to serve as windows; the worst sort, oval hovels of the same material, mud. Outside of each village is a burial-ground, which at first sight appears to consist of a number of the oval huts I have just described; but, upon a nearer approach, you find [*they*] are tombs of brick, really well constructed, with infinite labour and pains bestowed upon them; they certainly take better care of their dead, than of their living. r. 47.

The provisions are plentiful and cheap: but the fowls, hatched by artificial heat, are small in size. A ridiculous mistake of an officer is mentioned, who, seeing the men stretched out, to turn the eggs in the oven, thought that they also were hatched by this new kind of incubation. The Turkish army is described very ludicrously: indeed, the ludicrous prevails too generally: we smile at first, but we grow weary of constantly smiling: '*toujours perdrix ne vaut rien*.'

In the account of the Mamelukes, our author does not add greatly to what other travelers have said of them. The picture, however, is rendered familiar by some slight strokes, which bring it more within our clear comprehension. To the Mamelukes, general Baird, our author observes, is indebted for the means by which he formed the junction with the European army. The description of the Arabs contains little novelty. They were uniformly friendly to us; and, when they saw us sufficiently powerful to defeat the French, whom they supposed invincible—that our strength was not directed against them—that no taxes were required—that their provisions were paid for—their services rewarded; even when rewards and payments could not be enforced—these circumstances raised us much higher in their estimation. Yet our author thinks that they would not be reconciled to us, in consequence of our being Christians. He has recorded a singular error of these good people in this respect. They freely cursed the Christian dogs in the presence of his countrymen, without suspecting that they were giving offence, as the English were not of the same religion with the French. Our author's account of the dromedary corps, though not new, has not been so frequently the theme of every traveler's description, as many parts of his incidental information.

The appendix contains Munge's explanation of the mirage,

from the Egyptian Memoirs, and Bruant's description of the Egyptian Ophthalmia, from the Medical Memoirs of the Army of the East.

The plates are tinted, slight, and characteristic, but very indifferently executed.

ART. IX.—*A Comparative View of the Huttonian and Neptunian Systems of Geology: in Answer to the Illustrations of the Huttonian Theory of the Earth, by Professor Playfair.*

8vo. 5s. Boards. Longman and Rees. 1802.

THIS very able and intelligent author engages, at some length, in a disquisition, to which the talents and genius of Mr. Playfair have given an importance which it would never have attained from Dr. Hutton. It is singular, that, while opposed by every philosopher who has viewed the mineral kingdom with his own eyes, who has examined the native strata, the various veins, &c. in their natural situation, a theory should still be supported by men whose talents, however considerable, have not been directed in that line, and to whom the chief assistant science—chemistry—is rather generally, than minutely, known. The acquisitions of Dr. Hutton in mineralogy, when he formed his theory, were very inconsiderable, as we at first pointed out, and as we shall shortly endeavour to show. We have had opportunities of appreciating the acquisitions of sir James Hall, both in mineralogy and chemistry; and, though we respect the general knowledge and talents of Mr. Playfair—who, without aiding the cause he attempts to support, has offered us a truly interesting volume—yet it is obvious that this attention has not been particularly directed to the subjects of the present inquiry.

The author, whose work we are now to examine, writes with great clearness and precision, reasons with much logical accuracy, and seems well acquainted with the principal facts to which he appeals. He is sparing, indeed, of his references; and we at first thought that his knowledge had not been collected from original authors. In this, however, we find that we were mistaken. In the first part, he states, at large, the Huttonian and Neptunian theories, and then examines the probability of the general principles of each. Perhaps, at a transient view, each may be considered as equally probable: but our author concedes one principle too easily; viz. that rivers carry the materials of the land, through which they flow, into the sea. This is not a fact; and it may be more easily proved that rivers flow rather to meet the sea, than into it. In a tide river, at the ebb, how poor is the stream? In the greatest rivers, at how little distance does the lead bring up the mud? In bar rivers, the ledge of sand, formed by the concomitant currents, is at a short distance only from the embouchure; and, if land be gained from

the earth brought to the sea by the rivers, the increase, within the reach of historic records, is inconsiderable—within a period of three thousand years, almost insensible. This first step is therefore insecure; and, if Mr. Playfair will not admit these arguments, he must allow, what he seems warmly to deprecate, the eternity which this system gives to the world.

The point which our author labours, with peculiar zeal and success, to establish, is, that fire cannot have existed in the earth, to produce the changes supposed by Dr. Hutton to have arisen from internal heat, without being exhausted in consequence of its tendency to an equilibrium, or showing its existence on the surface. In the first place, fire cannot, he thinks, exist, as there is no *pabulum* for it: Dr. Hutton replies, that he only points out the effects of fire, and that he is not obliged to prove that it does exist, or to provide a *pabulum* for it; and Mr. Playfair, from sir Isaac Newton's question in his Optics, supposes that heat, 'in great, dense, fixed bodies, may be conserved, by the mutual action and re-action' of the heat, and the body heated. We are surprised that, to the first remark, it has not been directly asserted that the bodies supposed to have been fused are not so. Marble, for instance, is infusible: yet, when its air is prevented from escaping, Dr. Hutton contends that it may become fusible.—*Negatur*: for it is an old axiom, '*quod verbo dicitur, verbo negare sat est.*' If marble, that has been powdered, and exposed to heat in a close vessel, of materials that will not assist its fusion, be found to assume the appearance of any known state of calcareous earth, Dr. Hutton's theory will acquire some little support. With respect to Mr. Playfair's argument, it is only a query by sir Isaac Newton, and the nature of fire was then imperfectly understood. It would, probably, be no longer a question with him at this time. There is a source of heat, indeed, which neither of these antagonists has adverted to; viz. that which forms a component part of bodies, separated by decomposition, as we see in pyrites; and a lively imagination may suppose bodies to exist which contain as much more heat, in a given bulk, as they please; and this may be, at any time, let loose to dissolve strata, which are not fusible, and to consolidate the new continent, which it is incapable of effecting. We fear, however, that this will not succeed; for heat, as a component part, is not separated without the access of air, or the action of a third body, to destroy the former union. Should the heat, nevertheless, be allowed, our author shows, from the succession of strata, that some are interposed, whose properties are destroyed by heat, between those which heat is conceived to have consolidated; and this central fire, even if means of its support be admitted, must, in a series of years, have penetrated to the surface. We know, on the contrary, that the heat of the earth, beyond a

given depth, is uniform, and inconsiderable in degree: yet the strata are supposed to be consolidated by the heat, whose effects must thus reach to the bottom of the sea. Mr. Playfair knows, also, that the mean density of the earth is somewhat greater than the densest parts of the upper strata. What, then, must be the density of the nucleus, to compensate for the expansion produced by these violent fires? The objection to the opinion, that we have proofs of this heat from volcanoes, we shall select in our author's own words, as a specimen of his language and reasoning.

1st, That the heat of the matter erupted from volcanoes, is not such as it must have been, were it derived from that fire which the Huttonian geologist supposes to exist in the centre of the globe. This heat is supposed to be sufficient to fuse granite, and of course quartz, which, according to the experiments of Saussure, requires a temperature equal to 4043 of Wedgewood's scale. But many facts prove, that the heat communicated by volcanic fire, to the matter it throws out, seldom, if ever, equals 120 of the same scale. This is evident from shales, and various other fossils, fusible at 100, or 110, being found unaltered in the lava thrown out,—a proof that they had never been fused; and lava itself is fused or vitrified at a temperature below 40. Such a heat, therefore, can bear no comparison with that supposed by the Huttonian geologist to exist in the subterranean regions. It is, of course, a proof, that the lava erupted had not been derived from that source.

2d, The products of volcanoes are totally unlike those which are supposed in the Huttonian theory to be formed and thrown out from the central regions. The latter consist of granite, porphyry, and trap, substances never ejected by volcanoes. On the other hand, sulphur is an abundant production of volcanic fires, while it is never present in the unstratified rocks; a proof of itself decisive that the matter ejected from volcanoes is not derived from the same source with that which is supposed to give rise to the products of the central regions. The stony matter thrown from volcanoes appears indeed, from many facts, to be merely the rocks and fossils of the country, either fused or partially altered by the volcanic fire.

Lastly, The extinction of volcanoes sufficiently proves that they arise merely from the burning, or mutual chemical action, of a quantity of matter locally accumulated, and spent after a certain period. If they were connected with the central regions, no such extinction should take place. *rv. 57.*

We may be permitted to add to these remarks, that volcanic fires are generally near the surface; that they seldom extend even to the bases of the most distinguished volcanic mountains, which were probably such before they became volcanoes.

The author next considers the probability of the first principles of the Neptunian theory; and the chief difficulty which he finds, is the insolubility of quartz. The means by which he eludes this difficulty are summed up in the following short paragraph:—

When we consider the circumstances now enumerated, the influence of aggregation in preventing solution, the power of temperature in promoting it, the incalculable effects resulting from the exertion of complicated affinities, and the possibility of substances being compounds, which our imperfect knowledge ranks as simple, we can have no hesitation in admitting the conclusion which each separately establishes, that fossils may have been formed by water, though apparently insoluble in that fluid. And if an induction from facts shall render probable their aqueous origin, their present insolubility will form no objection of real force.' P. 87.

On this subject, we cannot enlarge. We have already offered our opinion on the formation of granite; and can only now add, that, from every appearance, the crystallisation of quartz, feldspar, and mica, was simultaneous. This circumstance, respecting bodies whose affinities to water differ so greatly, added to the numerous marks of a hasty crystallisation, show that granite was formed by the sudden subtraction of some principle which contributed to its solubility.

The necessity of heat for the consolidation of the strata is strongly urged by Dr. Hutton: but he here shows his slender acquaintance with chemistry; for the depositions in the chemists' phials, left neglected, are often singularly hard: the little flints in the Indian reeds show that this earth can be conveyed in water, and become indurated by crystallisation alone. What produces the little siliceous nodule, which rattles in the cavity of the Tabasheer, might form a world of flint.

The third part of this work is on 'the arguments in support of the Huttonian and Neptunian theories, from the positions of the strata of the globe.' In this part, our author follows the arguments of Dr. Hutton and Mr. Playfair very minutely, and points out the dextrous manner in which the latter often evades or eludes the principal difficulty. Some of these subtle Protean doublings we noticed, and attempted to unravel, in our review of the 'Illustrations.' The whole of the answer, in this part of the volume, is ingenious, and displays much knowledge of the subject; following the arguments of Dr. Hutton with great ability, through his observations on the stratified and unstratified rocks, as well as veins; and proving satisfactorily that the appearances coincide very decisively with the Neptunian system, while, in no case, do they support that of Dr. Hutton. We cannot, with propriety, separate the parts of our author's reasoning, or enlarge our article by an analysis of it. We shall, therefore, transcribe some circumstances of more general curiosity, as a specimen.

In the connection of the contents of veins with certain strata, an order is observed, inexplicable in the Huttonian theory, but satisfactorily explained in the Neptunian. This has been traced by Werner. Tin is never found but in primary strata, principally in granite. Mo-

lybdena and tungsten are found in the same situations, and of course have been formed at the same period. Uranium and bismuth, though perhaps of a formation rather less ancient, appear never to be found in stratified mountains. Gold and silver are sometimes found in the latter, though rarely. Mercury, the grey ore of antimony, and manganese, are discovered both in primitive and secondary mountains. Copper, lead, zinc, and especially iron, belong to all the ages of the world. Cobalt and nickel, are generally of recent formation. There is the same difference to be observed in the substances which accompany the metals. Felspar, shorl, the topaz, and the beryl, are considered by Werner as the most ancient. Quartz belongs to all periods. Among the calcareous substances, the most ancient are fluor spar, and apatite. Trap is of much more modern formation, and gypsum one of the most recent. p. 167.

With respect to vertical strata, it was, perhaps, sufficient to show that they could not be the effects of volcanic fire. Some of the most upright are of a fusible nature; and the fire which could raise such vast masses, must have necessarily left a variety of very unequivocal traces of its existence and power. We think that one cause of these appearances has not been sufficiently attended to; viz. the sinking of the strata at the opposite extremity. In many instances, we have been able to trace strata of schistus resting on beds of clay, which may have been washed away by the streams, and occasioned a subsidency of the lower, and a consequent elevation of the fractured, part.

The fourth section relates to 'the support which the Huttonian and Neptunian theories derive from the appearance and properties of individual fossils.' This part of the subject is the strongest fortress of the Huttonian doctrine; for, from the appearance of individual fossils, the agates, the septaria, &c. the whole system seems to have been formed. In the first account of it, in the Edinburgh Transactions, the granite occurs once only; and then, in appearance, incidentally, as if the whole had been adjusted before Dr. Hutton was apprised of the existence of this rock. Our present author first examines the fossils of the siliceous genus; and, with great ability, not only controverts Dr. Hutton's arguments, but even turns them against his doctrine. After speaking of the fossile and petrified wood, he adds the following observations:—

' This argument with respect to the siliceous petrification of wood, is of more importance than at first view may appear. It is not merely in itself an example which may be brought in support of the one theory or the other, neither is its importance confined to its proving the solubility of siliceous earth in water, and the possibility of the most perfect consolidation being effected by its deposition; but it establishes a similar formation with regard to other fossils, and furnishes a proof capable of being carried to a considerable extent. It is observed in specimens of wood thus changed, that where there are rents or vacuities in the wood, the siliceous matter deposited in these, has always

assumed the figure and structure of agate. It has the concentric coats of that fossil, its hardness, frequently its various shades of colour, and in short, all its properties. If, therefore, the petrified wood is proved to be formed in the humid way, it follows, that agates may be formed in the same mode; and this fact again may be pushed still farther, for agates are almost always found inclosed in other rocks, as, for example, in trap, and inclosed in such a manner as to render it undoubted that the rock and the inclosed agate must have had the same origin. So far, therefore, may the application of this argument be carried, from the intimate connection of these fossils. Dr. Hutton might perceive this connection, and the obligation it laid him under of ascribing the formation of siliceous petrified wood to fusion, since, if he admitted it to have been formed in the humid way, he must have been forced to admit, that agates and the rocks in which they are inclosed, might have had the same origin. It was, perhaps, a proof of polemical skill to assume that as an argument which he might have otherwise been obliged to obviate as an objection; and this might lead him to maintain, that siliceous petrified wood was formed from the introduction of fused siliceous earth, though its appearance is, *prima facie*, inconsistent with that opinion, and though it is fully refuted by facts.' P. 180.

The round nodules of flint, which, as we have stated in our review of the 'Illustrations,' are supposed to be injected into the mass of calcareous earth, when fluid in consequence of fusion, are shown by our author to have a very different origin, not only from their regular appearance in the calcareous mass, but from the impression of shells on their surface. The thin brittle shell of the echinus, whose every prominence is preserved after it has become siliceous, shows that fire could have had no share in the change. Agates, also, could not, he demonstrates, be formed by fusion, as they are sometimes hollow, and the cavity is greater, in proportion to the thickness of the shell, than could be accounted for by retraction; added to which, calcareous spar is sometimes found in the hollow. Yet our author thinks agates formed by crystallisation, from the circumference to the centre.

That the fossils of the 'calcareous genus' cannot have been consolidated by heat, requires few arguments to prove, as they contain so many perfect animal and vegetable remains. In the argillaceous genus, are the famous septaria, the great support of Dr. Hutton's system: yet these contain the impressions of organic substances, particularly shells.

In the argillaceous strata, petrifications are extremely frequent; more particularly shells and impressions of vegetables. These are found in clay, argillaceous schistus, argillaceous sandstone, argillaceous ironstone, and various others. The argument with respect to them, is the same as with regard to the other strata in which they are found. The operation of fire ought to have altered or destroyed these remains and impressions, nor is any cause pointed out in the Huttonian theory by which they could be preserved.

'This argument is conclusive, whether we consider the deficiency of explanation in the one theory, or the satisfactory solution afforded by the other. Let the example of marine shells preserved in sandstone be taken. If that sandstone has been formed by deposition from water, it might happen that the shells of animals existing in that water, might be involved in the deposit; and, in this case, no change would happen to them, except perhaps their being more or less impregnated with particles of the matter in which they were deposited. This is accordingly the state in which the shells are found, and the actual appearance exactly corresponds with that which the theory would lead us to expect. If, again, the stratum of sandstone were consolidated by heat, it is impossible to conceive how that heat should operate without changing the figure or structure of the contained shells. Nay, in this example, another circumstance is present, which still more forcibly proves, that heat could not thus be applied without producing some change. Argillaceous sandstone consists principally of siliceous and argillaceous earth: now these serve as a flux to calcareous earth, and cause its fusion at a temperature much lower than that requisite to fuse it when pure. Shells of marine animals have this earth for their basis; and had heat been applied to them, surrounded by argillaceous sandstone, such a combination must have been effected.' p. 206.

These remarks are, we think, decisive; and require not the additional argument which our author has adduced, from the peculiar minute delicacy of the impressions.

The origin of coal is, we have contended, vegetable: yet, as our author alleges, there is no reason, since its ingredients exist in the bowels of the earth, that a coal, of a purely mineral source, may not exist. Such seems, in his opinion, to be the anthracite; and this, as well as the graphite, is found in the primitive mountains. Yet our author seems occasionally to feel some difficulty in avoiding the doctrine of its being raised in consequence of sublimation. He is most successful in that part of the argument, where coal is connected or alternated with pyrites or lime-stone. He here dextrously places the Huttonian on the horns of a dilemma with respect to the bodies heated under pressure, from which he cannot, without peril, escape.

Rock-salt has certainly never been fused; for fusion, even under pressure, *as we know*, produces a substance very different from the saline stratum; and the clay with which its strata are intermixed have no marks of the action of fire. The formation of rock-salt is a problem of more difficulty than at first appears, since it is much purer than the saline contents of the sea; which seems to destroy Dr. Hutton's idea of its being formed while the present continent was emerging from the ocean. Rock-salt, however, contains no fossile remains of marine bodies; and it holds a large proportion of the water of crystallisation. Of gypsum, Dr. Hutton takes no notice.

The origin of metals is, we think, very obscure. Our au-

thor has shown that they do not arise from fusion, as Dr. Hut-
ton contends: but their true source, or the means by which they
have attained the state in which we find them, is scarcely
known. Many bodies will, we are aware, precipitate metals in
a metallic, or nearly in a metallic, state: but their application
and influence is uncertain. So far as a mineral ore is soluble in
water, there is little difficulty in ascertaining its source. The
large masses of native iron have been lately supposed to be the
productions of another planet, or of the moon, and will be again
the subject of our observations.

With respect to granite and whin, we have nothing to add.
It is not singular, according to our author, that lava should re-
semble trap, since it is probably the same substance fused. We
remember making a similar observation so long since as our re-
view of Bergman's *Opuscula*: but, on further reflexion, we have
some doubts of its force, or the propriety of its application.

We trust that we are now arrived at the termination of this
controversy—a dispute, indeed, not without interest, but in
which, as the great force of argument seems to be on one side,
the chief entertainment derived from it has been to observe the
shifts of ingenuity in evading those arguments, in explaining ad-
verse facts, and supporting, with almost unexampled perse-
verance, an opinion, chiefly by suppositions, suggested by ne-
cessity, by placing the tortoise under the elephant, when a fur-
ther or more stable foundation was required. We hope not
to be compelled to return to the subject: may it rest in peace;
and no rude hand disturb its manes!

ART. X. — *The Works of Solomon Gessner, translated from
the German. With some Account of his Life and Writings.*
3 Vols. 8vo. 18s. Boards. Cadell and Davies. 1802.

WE introduced a short account of the posthumous letters of
Gessner and his family, in the Appendix to our thirty-seventh
volume. We hoped that the collection would, previous to this pe-
riod, have appeared in the English language; and we waited to
introduce both to our readers at the same time. At this mo-
ment, however, of 'tip-toe expectation,' literary curiosity feels
an approaching torpor; and the magnitude of political objects
hides every less concern. Secluded in our closets (if Mr. Gif-
ford please, in our garrets), we must, however, continue to
mark the progressive accumulation of the literary stock, and to
discriminate the different merits of the various publications.
Gessner has been an universal favourite: mild and benevolent,
with a philanthropy as extensive as warm, his life secured a fa-
vourite reception for his writings; and his Death of Abel,
though deformed by the inflated language of his first English

translator, raised him to the rank of an epic poet among the critics of our own country.

'The poems of Gessner were almost all given to the world before he had completed his thirtieth year. About this period he married, and, as he himself informs us, his father-in-law, Mr. Heidigger, having a beautiful collection of paintings, consisting chiefly of the works of the great masters of the Flemish school, he devoted his leisure to the study of their beauties, and became deeply enamoured of their art. Gessner, who in his youth had received some lessons in drawing, resumed the pencil, but with a timid hand. At first he ventured only to delineate decorations for curious books printed at his office, but by degrees he rose to bolder attempts. In 1765 he published ten landscapes, etched and engraved by himself. Twelve other pieces of the same nature appeared in 1769; and he afterwards executed ornaments for many publications that issued from his press, among which were his own works, a translation into German of the works of Swift, and various others. The reputation which he acquired by his pencil, was scarcely inferior to that arising from his pen. He was reckoned among the best artists of Germany; and Mr. Fuselin, his countryman, in his "Historical Essay on the Painters, Engravers, Architects, and Sculptors, who have done Honour to Switzerland," gives a distinguished place to Gessner, though then alive.

'The private character of Gessner was in a high degree amiable and exemplary. As a husband, a father, and a friend, his virtues were equally conspicuous. His cast of mind was pensive, and even melancholy; his manners gentle.—In conversation he was mild and affable, and where the subject admitted of it, often highly animated, rising into great elevation of sentiment, and beauty of expression. But in every part of his deportment, there was that unaffected sincerity, that simplicity and modesty, by which true genius is so generally distinguished. With qualities such as these, Gessner could not fail to be loved and respected; and uniting to taste and literature the talents requisite for active life, he was raised by the suffrages of the citizens of Zurich to the first offices in the republic. In 1765 he was called to the great council; in 1767 to the lesser. In 1768 he was appointed bailiff of Eilibach; that of the four gaurds in 1776; and in 1781, superintendant of waters, all offices of trust and responsibility, the duties of which he discharged with scrupulous fidelity.' Vol. i. p. vi.

He died, at the age of fifty-six, of a paralytic stroke.

Respecting the 'Death of Abel,' the opinions of critics have been long established. The idyls, moreover, have been already translated, with engravings, if we mistake not, from the hand of Gessner himself; or, at least, with engravings from his drawings. To pastoral poetry, in general, we are not partial: it is the painting of a scene that never existed, that never could exist; for it combines two very opposite and irreconcilable states of society; and, indelicate as is Corin's description of the shepherd's life, in 'As you like it,' we fear it will be found to come nearer the truth. We shall, however, transcribe the translator's defence of pastoral poetry: but we suspect that neither

he nor Gessner ever read the admirable papers on pastorals, in the *Guardian*.

‘ Pastoral poetry, to which he was chiefly devoted, has been considered as one of the earliest forms of this delightful art.—In the more simple ages, when the wealth of men consisted chiefly of flocks and herds, the condition of a shepherd was respectable in the community, and his life a state of ease and abundance. In the possession of these blessings, passing his days in the open air, and having in view the most beautiful scenery of nature, the emotions of the heart would sometimes be excited, and the voice of untutored genius make itself heard. Hence those artless strains of rural poetry in which are breathed the first accents of the pastoral Muse. Though deficient in harmony and delicacy, these ruder efforts would often be true to nature and passion; and the shepherds and cowherds of Sicily doubtless furnished the models on which the *Idyls* of Theocritus were formed. It is the peculiar praise of Theocritus, and constitutes a considerable part of the charm of his writings, that he departed but little from his models, that his scenery is evidently copied from nature, and that his characters and manners appear to be nearly such as the peasantry of Sicily presented to his observation. Virgil copied Theocritus, and departed farther from real life; and since the revival of letters, the greater part of the pastoral poets of modern Europe, particularly those of Italy, have indulged still more in the imagery of fancy; with landscapes, composed indeed of the most beautiful features of nature, for the imagination can paint nothing fairer, they have given us manners and characters in a great measure ideal. Yet pastoral poetry of this description has its charms. In the mixed condition of our existence, the forms of beauty, innocence, and happiness, rise at times, and fade on our view. Imperfect and fleeting as they are, they afford such furniture to the imagination, as serves to decorate those creations of fancy, which, while they excite, tend in some degree to gratify the natural “longing after a happier age.” Vol. i. P. x.

‘ It is not however to be disputed, that where we depart so far from nature, the interest of the scene is apt to languish.—We are creatures more of feeling than of imagination, and can deeply sympathize only with beings of our own species, and in sorrows which we ourselves may participate. In the lives of the pure inhabitants of these Arcadian landscapes, such as they are usually represented by the predecessors of Gessner, there is too little incident, in their sufferings there is too little of real pathos, to fix the curiosity, or agitate the heart. The modern writers of pastoral have resorted little to invention; they have in general contented themselves with imitating the descriptions and sentiments of the ancient poets, and hence, of all the varieties of poetry, this is commonly the most meagre in its subject, and the least diversified in its strain. It is not however to be doubted, that this sameness and insipidity are more to be ascribed to the slavish imitation of the ancient pastoral characters and topics, than to the confined nature of the subject. Ramsay, Burns, and Macneill, poets of the northern division of the island, who have not copied Theocritus, but followed his example in drawing the scenery and the manners of rural life in

their own age and country, have enlarged and beautified this department of poetry. It were perhaps to have been wished, that Gessner had taken a similar course, but his learning and fancy carried him back to the æra of ancient Greece. In his pastorals, the rough simplicity of the Swiss peasant, the awful sublimity of the Helvetian scenery, are not to be found. Amidst the softness of a Sicilian landscape, he calls into life the fabled personages of the classic mythology, and revives that pure and virtuous race of mortals, who are supposed to have lived in the golden age. — But though he takes Theocritus as his model, unlike his other imitators, he has chosen his subjects for himself, and given to pastoral poetry a range, of which it was not before known to be susceptible. Vol. i. p. xiii.

The other parts of our translator's commendation we can cheerfully join in. Gessner's attention to nature, his moral purity, his tenderness and sensibility, are truly admirable. We only regret that he chose the form of pastorals.

The first volume contains the Death of Abel; the second, the idyls; the third, poems approaching more nearly the dramatic form, entitled Miscellanies, of which a part, also, of the second volume consists. To the first and second, the English reader is no stranger. We do not recollect that the third has before appeared in our language; and the miscellaneous part of the second is new to us.

Those, however, acquainted with the mild benevolent spirit of Gessner, will want no clue to lead them to the character of this part of his works. The form is artificial, the manners those of a fabulous æra; so that they, in general, are less interesting. Yet there are traits of nature, of sensibility, and beneficence, which, notwithstanding every error of plan or conduct, captivate the heart, and hurry away the finest feelings, till the modern state of society, and the rules of the Stagirite, are equally forgotten. In selecting a specimen, we are somewhat at a loss. The more strictly dramatic pieces will scarcely admit of any part being separated from the rest; and the others approach very nearly to the idyls. The translator has commended the 'contemplations on grasses,' as a proof of Gessner's acquaintance with natural history. It displays minute observation, but totally overthrows the pretensions thus injudiciously brought forward. Yet it is an elegant and interesting little piece, from which we shall transcribe some portion.

'Ye dark towering pines! that rear high your unbending heads,
and spread with your shade a solemn gloom around; ye lofty oaks,
and thou stream, that pour'st thy silvery brightness o'er the grey
mountain's brow—not now will I celebrate your charms: I will look
down on the turf that surrounds me; I will contemplate this wonder-
ful world in miniature, replete with unnumbered beauties, with innu-
merable species of plants, with millions of different inhabitants, that
fly from flower to flower, or wander among the mazes of the grass.

Endlessly diversified in form and beauty, each little individual finds here all that is necessary for its subsistence and its pleasures: fellow-citizens of this earth, each one is in its kind, perfect and good.

'How softly dost thou murmur, little stream! as thou passest among the water-cresses, and the brook-lime, that spreads its blue starry flowerets o'er thy waves. Thou encirclest every one of its stems with a glittering ring, and shakest its tender blossoms as thou passest by: from either bank the luxuriant grass, mixed with flowers, bends over thy tide: thy crystal waters flow under the variegated arch, and reflect its beauteous hues.

'I will look down into this little thicket of waving grass: how beautifully show the various tints of green, as I turn them to the sun! The tender herbs spread their foliage unseen among the thick grass, or piercing through its mazes, rear their fragile flowers to the light. But thou, purple violet! emblem of modest wisdom, hidest thy beauteous head deep in the bosom of the leaves, and spread'st unseen thy soft perfume around; while thy scentless sister blooms on every bank, and unfolds her azure blossoms to every passing gale.

'A variegated tribe of insects pursue each other among the grass: my eyes soon lose them in the green shade: now they sport again in the sunshine; they fly in swarms around, and dance glittering in the noon-tide air.

'What variegated flower bends yonder over the stream, decked with such bright, such brilliant tints? Ah! pleasing deception! 'tis a butterfly, that has just taken flight, and left the slender blade, still trembling with its light pressure. What a beautiful insect flies past me, armed with black scales, and decked with red glittering wings! See, he perches (perhaps to seek his mate) on yonder thistle. Flow gently, thou murmuring stream! ye Zephyrs, wave not the grass or the flowers, methought I heard the sound of softest music. Yes, they sing, though our ears are too dull to catch their soft tones; as our eyes are too imperfect to perceive all the minute beauties of their formation.'
Vol. ii. p. 197.

Many parts, indeed, of these volumes deserve to be mentioned with commendation. In the second part, a new conclusion to the story of Inkle and Yarico is exquisitely tender and pathetic; and the 'Morning Song' deserves no small share of praise. As the original is not before us, we cannot speak of the fidelity of the translation. It appears to be chaste, easy, and often elegant. Numerous plates embellish the work: but, while the designs of Gessner himself exist, every other must displease: they are, however, in general, neatly executed; and the subjects are well chosen.

ART. XI.—*Adolphus's History of England.* (Continued from p. 286 of our present Volume.)

WE have endeavoured to mark with some care a feature early prominent in the present reign, the destruction of the

oligarchical system which surrounded the throne—a system which, in every view, must have been beheld with an indignant eye by the son, since from it his parents had suffered so severely. This attempt occasioned the early distinction of the new party, known by the name of the King's Friends; and, after all the changes of this eventful reign, the traces—indeed more than the traces—of the two parties still remain. Even at this awful moment, when all distinctions are and ought to be abolished, the unanimity we display is chiefly produced by common impending danger, and will again perhaps disappear at the return of tranquillity. Having traced this principle to its source, and examined, in one view, its influence through the continuance of a long and disastrous war, we shall now only point out some of the more striking events of this reign, in order more strictly to appreciate the historian's merit.

We left Mr. Adolphus, in the regular detail, at the conclusion of his general view of the affairs of India. The last administration of lord Chatham obtrudes itself on our notice; and it may be asked in which of the opposing parties he is to be arranged. The question is not merely curious; for on it hinges his ill success. From the moment of the proposed coalition with lord Bute, he seems to have opened his arms to the king's friends, and to have courted the whigs merely to attain sufficient strength. Like all other coalitions, this was unsuccessful; and the last moments of lord Chatham's public life are described with energy and spirit by Mr. Adolphus.

These circumstances, so new, and so insupportable to his ardent and commanding spirit, produced violent effects on his constitution. The gout tormented him incessantly, and the agitation of his mind, no less than his corporeal sufferings, impelled him to frequent change of residence. From London he went to Bath; dissatisfied with Bath, he attempted to return to London, but was detained by his disorder at Marlborough; he next retired to Hampstead, but soon disliked that situation, and repurchased his former residence at Hayes. His mind was agitated by passions inimical to his repose, and his spirits were occasionally depressed almost to despondency. He was unable to attend public business, and the other members of the cabinet, considering his health irreparably injured, projected new arrangements, and adopted measures not only without consulting him, but in direct opposition to his known opinions. Such was the situation to which that great minister was reduced, who had recently declared in the cabinet his resolution not to sanction measures which he was not allowed to guide. Such were the consequences of forming, what Burke afterwards, with no less wit than truth, described as, “a checkered and speckled administration; a piece of joinery, so crossly indented and whimsically dove-tailed; a cabinet so variously inlaid, here a bit of black stone, and there a bit of white; patriots and courtiers, king's friends and republicans; whigs and tories; treacherous friends and open enemies;—that it was indeed a very curious shew, but utterly

unsafe to touch, and unsure to stand on." The same author, pursuing the subject, has observed, "when he had executed his plan, he had not an inch of ground to stand upon; when he had accomplished his scheme of administration he was no longer a minister."

The want of union in the cabinet was evident in many of the proceedings in parliament. When the chancellor of the exchequer proposed the land tax in the committee, he stated it at four shillings in the pound: "A sum," he added, "necessary for one year longer, to give room for the most brilliant operation of finance ever seen in England; to ensure to us dignity abroad, stability at home, and enable us to enter with advantage into any future war." The proposition was resisted by the country gentlemen, who contended for the reduction of the land tax, according to the usual practice in times of peace, to three shillings in the pound, and derided the mighty consequences which were promised to result from the additional shilling, as it would produce only five hundred thousand pounds. Mr. Charles Townshend not having prepared his friends to support his proposition, the new adherents of ministry declared that the land tax ought to be perpetuated at four shillings in the pound. This opinion was combated with much asperity, and treated as a breach of faith. An amendment, changing the supply from four to three shillings, was moved by Mr. Grenville, and carried by a majority of eighteen. Thus the chancellor of the exchequer was in a minority on a question of finance: an extraordinary indication of weakness in the cabinet.' Vol. i. p. 316.

In forming the administration which followed, there were many difficulties. Charles Townshend, who united the most lively wit with considerable talents for business, and who, from age, might be expected to lose the levity which had procured him the imputation of unsteadiness, died in the moment when his abilities and experience were most wanted; and the urgency of the public situation produced a temporary union of the duke of Grafton's party with that of the duke of Bedford, and, ultimately, the administration which conducted so weakly and unfortunately the American war. Of the old aristocracy, the Bedford party then only remained; and the whigs were, through the whole of that period, the most determined of the opposition.

The foreign history of this æra is not detailed with any peculiar advantage of information, or any distinguished depth of reflexion. It would require stronger inducements than we have yet felt, to lament the fall of the Jesuits; and we almost smile at the horror expressed 'on their being torn from their homes and social connexions.' The Jesuits, more than any other society, were citizens of the world, unmarried and unconnected. The conduct of administration respecting Corsica requires some explanation, perhaps some apology.

In a history of this country, not only the opposition to administration, but the popular discontents require to be attended to. The king, with every wish to make his dominions flourish,

and his subjects happy, was yet assailed by a torrent of virulent invective, from at least those who *adopted* the principles of opposition. In many instances, the connexion might have been brought more nearly to some of their particular friends. This epidemic *mania* continued, to the disgrace of the nation, for many years; and, though it brought forward brilliant talents in the two antagonist parties, nothing can excuse the violence of some authors, and the scurrility, ill disguised, of language even offered to the throne. From this polluted mass, we shall not draw any of the disgusting objects to a more general view, but remark, that our historian's account is candid and correct. What he observes of the excellent and execrable Junius—for his talents demand the former title, and their application the latter—merits our attention.

Among the most conspicuous of those whom the rage of political discussion engaged in publications, was an anonymous author, who sent his productions to a newspaper, under the signature of Junius. His essays commenced with the present year (1769), and, with occasional interruptions, continued till the beginning of 1772. In him the ministry found a severe and formidable censor: his information was extensive and minute, and applied to many objects which were supposed to be secret. He detailed, without scruple or delicacy, all the facts in his possession, and often supplied a deficiency of information by bold conjecture or shameless fiction. His writings were distinguished by energy of thought, perspicuity of style, felicity of images, and brilliancy of wit: but his wit was scurrilous and malignant; wounding, without remorse, the honour of a gentleman, the feelings of a father, and the dignity of the sovereign. Although he made personal topics the principal vehicles of his satire, his knowledge was not confined to mere anecdote, but comprized a general acquaintance with the laws and constitution of the country, the history and usages of parliament. Junius was long the admiration of England, but perhaps his talents were too highly valued. Many political writers before him had possessed his advantages; and whatever opinion may have been studiously diffused respecting his knowledge, wit, and eloquence, in these requisites he did not excel the great party champions of the late reign, Bolingbroke, Pulteney, and Chesterfield. The secrecy in which he effectually involved his real person, was highly advantageous to him as a writer. It furnished him with the opportunity of declaring such sentiments as would be agreeable to the public, without reference to any opinions he might previously have entertained, and enabled him to assail men in every rank and condition of life, without possibility of retaliation, or dread of inquiry. Those who answered, presented a full mark to his assaults, and their principles, manners, professions, and even their habits, were unsparingly attacked, while he remained impassive to reproach, and exempt from the necessity of defence. Perhaps, too, much of the curiosity and eagerness with which his publications were received, resulted from this circumstance. A series of satires presented for so long a period, from one pen, would have ceased to excite regard, had any circum-

stance respecting the author been known. Those who by his conversation could have learned his sentiments, by his connections could have divined his motives, or from his pursuits have explored his means of information, would soon have become languid readers, and the sensation of indifference, spreading from several quarters, would have extended to a general disregard, perhaps to contempt. Even with all the advantages he possessed, Junius, in order to stimulate the public curiosity, was occasionally compelled to assume a tone of brutal ferocity, which reduced his compositions to a level with those of the most profligate libellers, and sanctioned the imputation of a motive for concealment, very remote from an honourable love of freedom in the declaration of his opinions.

'Anxious to gratify to the utmost that licentious disposition on which the success of his productions in a great measure depended, this writer thought fit to address to the public, through his accustomed channel, a most virulent attack on the person, conduct, and government of the king, and threatened general dissatisfaction, rebellion, and revolution, as the result of the present measures. By this letter, the printer, and several others who re-published it, incurred the penalties of the law; but the popularity of the author was not diminished by the audacity which impelled him to the verge of treason.' Vol. i. p. 406.

The dispute with Spain, respecting the Falkland Islands, is detailed with peculiar accuracy and propriety. The author, *'from private information,'* is well aware that this was a blow aimed in conjunction with France, and intended to be pursued, if the weak libidinous monarch would have suffered his pleasures and his expenses to have been but slightly interrupted and curtailed. Choiseul, the contriver of the scheme, was dismissed, and Spain left to escape from the toils with as little sacrifice as possible. She escaped well; for she sacrificed what Great-Britain was not to retain, and which indeed was not worth retaining.

About this period (1772) we meet with the first traces of those petitions of the dissenters, to be relieved from the oppressions and penalties of the Test and Corporation acts, which afterwards blazed with so much violence, occasionally fanned with the gales of faction under the garb of religion, and of ambition assuming the guise of liberality and tolerance. What might have been gained, and what ought to have been gained, if it had been pursued with mildness and candour, was lost by an impolitic violence: what might have been safely granted, if asked, was refused when grasped at with eagerness. The same period is also distinguished as the æra when a complaint respecting the publication of the debates in parliament ultimately produced the present regulated permission, or rather connivance.

We have formerly commended the general abstract of East-Indian affairs; and the same intelligence, the same candour,

distinguishes the subsequent accounts. The improvidence and mismanagement of the East-India Company are well detailed: but we want, or at least the inexperienced reader will want, some further information respecting the Indian trade, and the *real* source of the opulence which accrues to this country from our commerce and connexion with India. The parliamentary investigation of lord Clive's public conduct is followed with sufficient precision, but without those minuter traits which an historian, so near the period, might have easily collected, and without that due discrimination of authorities—for many of the pamphlets were varnished tales—which might have been expected. The whole subject is now easily understood; and we wished to have seen it more clearly elucidated.

What relates to foreign politics, is well compacted, and assisted by much '*private information*;' and the attempts of France to arm, in 1774, under the pretence of assisting Sweden, discover, very completely, the artful restlessness of that insidious power. The conduct of France, in her ill-judged assistance of America, is not equally well explained. The author does not trace it *ab ovo*. Perhaps authentic documents were wanting: but those who had occasion to be spectators from no great distance saw her manœuvres long before the permitted residence of Dr. Franklin, the intrigues of her emissaries in some of the earliest movements of rebellion. The period is not yet, indeed, arrived, when the whole can be safely developed. Almost all the treacherous agents of France, in this business, have met their punishment—a punishment, the direct consequence of their crime. Even La Fayette himself, in the dungeons of Olmutz, probably regretted much of the conduct he had pursued.

In the progress of the war with France, a contemporary historian should have been more minute and accurate. When Mr. Keppel sailed, he took the *Licorne* and the *Pallas*: the latter is not noticed; and the action between the *Belle Poule* and the *Arethusa* is somewhat inaccurately confounded with the capture of the *Licorne*, though the *Pallas* is afterwards mentioned among the captures of that period. The narrative of the conduct of admiral Keppel is by no means distinct; and there *seems* to be an anxiety to avoid any discussion. From Keppel's own account of the direction of the wind, and the situation of the French fleet, instead of bearing down, and ranging along the line, he might have cut off the rear. Lord Rodney and lord St. Vincent would have done so, without any apprehension of a lee-shore: but the omission of some of these inquiries, with the slight mention of lord Rodney's celebrated victory over Langara, lead us to think that several of the former party-opinions have not quite lost their influence. This was the foundation of some observations, in the commencement of the first article;

and we are still aware that similar prejudices may remain with ourselves. Indeed, we may observe, in general, that the conquests and successful repulses of the English are related with the chilling apathy of an historian of another century. Mr. Adolphus is seldom warmed by his subject; and success or defeat scarcely moves him either to animation or dejection. The other events of the war are but coldly, and sometimes imperfectly, related: nor does he, at any time, engage in any reflexions on the consequences which necessarily accrued from the events of either kind. The brilliant and successful attempt of lord Howe to relieve the garrison of Gibraltar, in opposition to the combined fleet of almost double the number of ships under his command, is related as a common occurrence, though Mr. Keppel's retreat, at even the suspicion of a somewhat superior force, is passed without censure, and almost considered as meritorious. Indeed, the apparent determination of Mr. Adolphus to conclude his history in three volumes, has made the latter part of his narrative singularly rapid, and often inexplicit.

The domestic history of this period is interesting and eventful. In the general opinion, so early as the year 1778, the subjugation of America was considered as hopeless; and the public views were directed to peace. Lord Chatham was looked up to as the saviour of the nation; and his character and influence, it was supposed, might even again reconcile America to a state of dependency. We now know that Franklin smiled at this idea; and even declared that an attempt of this kind would be at once fatal to the popularity of its author. Lord Chatham, too, broken and dis-spirited, could no longer hurl the thunders of Britain with effect; and the following observations merit our notice and commendation:—

‘Peace with America began now to be the object of general desire in England, but the means of attaining, and terms of securing it, occasioned great diversity of opinion. The plan of the ministry was more adapted to reason than hope; it proffered concessions which, if early held forth, would have been irresistibly inviting, but the American cause being not less strenuously espoused, after the assumption of independence than at any previous period of the contest, it could not be expected that the leaders of congress would be backward in using those arguments, and adhering to those resolutions, which were defended with so much pertinacity in the capital and senate of the mother-country. Opposition, although divided in their sentiments, united in decrying the measures of government, and distressing administration; but could not form a system of conduct which would combine them in any direct or attainable project. A party rather active and clamorous, than numerous and popular, were desirous to concede the full extent of the American requisitions, and even to solicit, with humility approaching to abjectness, a preference in the favour of the late dependencies of the kingdom. Another party adopted the opinion of lord Chatham, and strenuously resisted the claim of independence as

fatal to the welfare of Great Britain. The eloquence of lord Chatham, employed occasionally for party-purposes, and procuring credence for exaggerated statements, had caused a general delusion, from which even the ministry were not exempt. The dignity of the mother-country was engaged in the American contest, but it affected her prosperity less than the public could be induced to believe. Lord Chatham deceived himself as much as others on this subject, and perhaps sacrificed his life to his patriotic feelings. Designs were probably entertained of engaging his assistance as head of an administration, in directing the war, or giving efficiency to modes of conciliation. Such an opinion, founded on the words of his last speech in parliament, was strongly maintained, and the measure would have been highly important in reconciling great part of the nation to the proceedings of government. The report of such an intention, created lively sensations in foreign courts, and the measure was supposed sufficient for the restoration of vigour to the councils, and glory to the arms of Great Britain. But no operations, consistent with the opinions professed by lord Chatham, could have reconciled the Americans, unless absolutely vanquished, to the idea of dependence *. Vol. iii. p. 128.

The public anxiety of 1778 arose, by degrees, to discontent. Petitions multiplied from various places; and the very dangerous expedient of corresponding committees seemed to rival the first traces of the federal union of America. Faction now assumed another guise: but, though the subjects were different, the principle was the same; and the horrors of popery were an engine of opposition, as well as the petitions of the dissenters. Ireland, at the same period, thought this a proper season to revive some pretensions, to complain of grievances in part real, and to insist on redress, which she should have, perhaps, voluntarily received from this country. The urgent demands of the American war had drained that kingdom of a part of its established army; and a resolute, but suspicious, band of volunteers had taken up arms, avowedly to defend the country, but, in reality, to overawe its government. The fleets of France and Spain rode triumphant in the Channel; for, since the trial of admiral Keppel, it had been too fashionable to count the weight and the number of the enemy's guns. In short, anarchy at home, and impending ruin from abroad, filled up the measure of distress: the whole hemisphere was covered with a cloud, in which the victory of Rodney, and the repulse of the floating batteries at Gibraltar, formed only some bright spots, without promising a clearer sky. In the midst of all these difficulties, the versatile Joseph again visited Paris; and warm admiration

* * On this subject I may quote the opinion of Thomas Paine. "Death," he says, "has preserved to the memory of this statesman that fame which he by living would have lost. His plans and opinions towards the latter part of his life, would have been attended with as many evil consequences, and as much reprobated in America, as those of lord North." Letter to the Abbé Raynal, p. 64.

This opinion, we know, was communicated to Paine from Franklin. REV.

succeeded the contempt and indignation* excited by his first journey. Catharine, under the influence of Prussia, had armed in defence of commerce, and formed that celebrated northern coalition, which threatened destruction to the trade and maritime power of Great-Britain.

‘ The perplexities arising from the aspect of foreign affairs, were augmented by untoward appearances at home. Although Great Britain had never before made such extensive military efforts: although no other country had ever conceived the idea of sending and provisioning so great an army across the Atlantic, the war, marked by ill success, had ceased to be popular; national honour, or the jealous vindication of the rights of sovereignty, were no longer considered equivalent to the enormous expences, which the arts of opposition had taught the people to regard with peculiar suspicion and malevolence. The authority of Great Britain over the colonies had been so often explained, qualified, and partially renounced, that its value was rendered almost insignificant, and the pompous accounts of beneficial commerce with America were generally discredited, since a long protracted suspension of intercourse had produced no alarming effects; but, on the contrary, the strength and resources of the country surpassed expectation, and exposed to ridicule the gloomy forebodings of theoretical financiers. The grant of American independence was therefore contemplated as a moderate medium for the acquisition of peace; nor was the necessity of yielding to a formidable combination considered derogatory to the national honour, which had been so gloriously maintained during the struggle. Had it been thought expedient to aim at exciting strenuous sentiments of enthusiasm, the state of the public mind was peculiarly unfavourable. Long declamations and verbose complaints of speculative grievances, or unfelt oppressions, had rendered political discussion odious, and public spirit suspected. The people of the metropolis, immersed in luxury, and abandoned to dissipation, surveyed with apathy the course of public events; while those in the country received as incontrovertible dogmas the rash speculations of their mock-representatives, their delegates, and corresponding committees, who aimed at general reform, and, for the purpose of overthrowing the ministry, did not hesitate to shake the very basis of government.’ Vol. iii. p. 418.

Whether accident or wisdom dictated the timely signature of the provisional articles, we know not: but the eagerness of America, to gain her wished-for independence, acted as a talisman, and unnerved every other power. France, also, seemed to have gained her object; and Spain found herself at the same distance from her wished-for acquisitions, as at the commencement of the war. Thus peace was concluded with a surprising rapidity; and we think the successes of Great-Britain, to which our author in part attributes it, had a very subordinate share. When the situation of this country is considered, the peace

* ‘ From private information.’

might be styled honourable and advantageous. The inconveniences that might have resulted from some of the cessions, subsequent events have obviated: but these form no apology for the peace-makers, whose haste to obtain this desirable blessing rendered them too eager to be cautious, and precluded better terms.

In the last chapter, the historian takes a survey of the state of the different powers engaged in this contest; and shows, that, though the object was to overthrow the authority of Great Britain, and to tarnish her glory, notwithstanding that the great and principal point was obtained, she, alone, could again rise above her misfortunes — she, alone, was unhurt by wounds which proved almost fatal to some of her antagonists, and injurious to all. Mr. Adolphus concludes with the following judicious reflexions:—

‘ Reviewing the period comprised in the present narrative, we find the kingdom involved in difficulties of the utmost magnitude. A combination of talent and influence, forming an opposition to the court, which drove from the helm, in eight years, five lists of ministers, besides occasioning subordinate changes; the populace impelled to the extremes of violence, and the verge of insurrection, while the administration of the laws appeared too feeble to restrain their excesses; the stability of government scarcely restored, when the passions of the nation were engaged by a rebellion in the American colonies, aided in its progress by those who are called the natural enemies, and those who ought to be the natural allies of Great Britain; the contentions of party maintained during this conflict with increased fervour, and the conduct of the revolvers justified and applauded by able and resolute parliamentary advocates; the war unsuccessful, the peace censured as inglorious; yet the occupations of commerce, the calls of justice, the duties of the subject, and the cares of government, pursued with unabated vigour and philosophic temperance. What could produce these astonishing effects? what ensure, in such a crisis, the safety both of government and liberty, but the spirit of the British constitution, so admirably adapted to the preservation of both? Protected by that constitution, all classes concurred in their endeavours to heal the wounds inflicted by war in the bosom of their country, and soon found their cares repaid with success beyond their hopes. Hostile confederacies may again menace, and internal dissensions may again plant inveteracy between leaders of political parties; but the great interests of the state, the stability of law, and the full enjoyment of freedom, can never be impaired, while Great Britain preserves inviolate that source of greatness, and spring of happiness, — her inestimable constitution.’
Vol. iii. p. 599.

Having followed our author with so much care, interspersing our praises, and, in a few instances, our censures, as the different parts seemed to require, we shall not enlarge on the merits and faults of this work in general. The former undoubtedly predominate in a very considerable degree; and, where we have found deficiencies, or, as we have suspected, errors, it is

not easy to say how, at this period, the first should have been supplied, or the last corrected. The history, on the whole, is candid and impartial: it sometimes, we have thought, assumes too nearly the form of annals. The reflexions are sparingly interspersed: nor are these profound or philosophic. The language is neat and correct, seldom rising to peculiar elegance, and never sinking to impropriety or meanness. The few characters which Mr. Adolphus has introduced, are drawn with spirit and precision: but the sources of many of the events, which might even now be safely traced, are passed over too cursorily. The present, however, as a first attempt, is truly respectable. In a future trial, or in a continuation, our author's now unfledged pinions may be equal to a sublimer flight; and, should he not be able to emulate Sallust or Tacitus, he may at least become a Suetonius or a Livy.

ART. XII.—*The Edinburgh Practice of Physic, Surgery, and Midwifery; preceded by an Abstract of the Theory of Medicine, and the Nosology of Dr. Cullen: and including upwards of six hundred authentic Formulæ, from the Books of St. Bartholomew's, St. George's, St. Thomas's, Guy's, and other Hospitals in London, and from the Lectures and Writings of the most eminent public Teachers. With twenty 4to. Plates. A new Edition. 5 Vols. 8vo. 3l. 15s. Boards. Kearsley. 1803.*

'ILL weeds grow apace;' but a more rapid increase we have seldom witnessed, even within the tropics, where fruits advance in bulk so quickly, that their growth is almost visible. We seem but yesterday to have examined a huge octavo of eight hundred pages; yet it appeared three years since; and is now augmented to five volumes, each of more than half the size of the first edition. Fortunate has been the author, if all his former copies be sold. This, however, is foreign to our purpose.

In the first edition of this work, though a prior appearance was hinted at, we chiefly noticed the author's plan and object. We there expressed our opinion, that the volume was connected with Edinburgh in name only—an opinion which subsequent information confirms. A tolerably well-compacted history of medicine precedes, which concludes with an account of the life and works of the first Dr. Monro. The work itself commences with an abstract of Dr. James Gregory's 'Conspiculus Medicinæ.' This is followed by what we think an imperfect and inadequate view of Dr. Cullen's system; but, though included under the part entitled the 'Theory of Medicine,' much of it relates to his pathology, and his particular doctrine

of fevers. An abstract of the Brunonian system succeeds, more closely and scientifically compacted. From the pains bestowed on the last, we should have almost suspected the author to have been a follower of Brown, but that he adds remarks which must wholly destroy its credit with all, except the young, the superficial, and the indolent.

The chapter on nosology contains an account of the system of Dr. Cullen, and is followed by therapeutics, or the practice of medicine. But, though this meaning of the term be supported by some authors of the Stahlian school, in modern writers the *therapeia* includes only the general doctrines of remedies: even Torti styles his treatise on the practice of physic, so far as it regards intermittents, *Therapeia Specialis*. In this part, our author chiefly follows Dr. Cullen, prefixing Baeta's Comparative View of the Theories of Cullen, Brown, and Darwin.

In the Practice, though Dr. Cullen be in general copied, we find an ample and a faithful compilation of what the best authors have also remarked, and commonly in their own words. To follow the author, therefore, minutely would be a tedious and useless task; nor can we avoid regretting that he should have yielded to the indolence of copying, when, with a little labour, he might, in a much shorter compass, and much more advantageously, have compacted the opinions of each practitioner in a continued detail. The first volume contains the fevers and inflammations, concluding with gout.

In the second volume, the *exanthemata* commence; and the practice of medicine concludes in it with the *dolor faciei*. As the assistance of Dr. Cullen, in the less general diseases, sometimes fails him, the author finds other resources; and he has compiled from writers of considerable credit. Indeed few works of consequence, under the respective heads, seem to have escaped him; and the original words are, as usual, employed. Of course, we need not follow him. The chapter on poisons is sufficiently full and satisfactory; and the appendix relates to pneumatic medicine, including a description of Mr. Watts's apparatus for inhaling factitious airs.

The third volume commences with a history of surgery, which is, however, not properly brought down to the present period. On the subject of wounds, compilation is less obvious; and the author's chief assistants are Mr. Latta and Mr. Hunter: the observations of the latter author chiefly relate to gun-shot wounds. With respect to poisoned wounds, Fontana, Mead, Moseley, and the tribe of philosophers and physicians who have written on hydrophobia, are liberally copied. The doctrine of inflammation here adduced is that of Mr. Hunter; and he is principally followed, though the remedies generally employed are properly noticed. Ulcers are the subject of the

next chapter; and these are succeeded by a full view of the treatment of cancers, and the unsuccessful attempts of numerous pretenders. Inflammatory tumours, including lumbar abscess, whitloes, contusions, sprains, chilblains, and tumours on the nerves, conclude the volume.

The fourth volume contains abstracts from the most approved authors, on indolent tumours; diseases of the bones; various modes of letting blood, with the management of issues; sutures and ligature of arteries; injuries of the brain; diseases of the eye, ear, and nose; fistula lacrymalis; affections of the mouth and throat; wry neck; bronchotomy and cesophagotomy; sore nipples; paracentesis of the thorax and abdomen; hydrocele, hæmatocele scroti, varicocele, cirescele, spermatocele, pneumatocele, and sarcocele; an account of calculi, with the remedies for their solution, and lithotomy; diseases of the bladder, &c.; luxations and fractures; amputation; cutaneous diseases; distortions and contractions; bandages; method of making anatomical preparations, and embalming. At the end are collected the different facts and observations relative to suspended animation, electricity, and Galvanism. A description of some new chirurgical instruments, and a table of mercurial preparations—we suspect from Swediaur—are added.

The last volume is on midwifery, and the diseases of children, including, among the latter, rickets and cow-pox. The chapter on cow-pox was communicated by Mr. King. A case of hydrocephalus, annexed, was removed by mercurials, and, towards the end, digitalis. The unguentum mercuriale was rubbed in, and calomel given in large doses. Some useful tables, &c. are subjoined.

On the whole, we think this compilation, notwithstanding its weeds be numerous, and the hoe be much required, is not destitute of merit. The best authors on each subject have been consulted, and, in many instances, advantageously. We need not again repeat, that the work might have been shortened by offering abstracts instead of copies; but it might, perhaps, have not been so satisfactory.

ART. XIII.—*The Substance of a Speech, intended to have been spoken in the House of Lords, November 22d, 1803, by R. Watson, Lord Bishop of Landaff.* 8vo. 1s. 6d. Cadell and Davies. 1803.

AT what period of time, since the commencement of the present war, this speech was *planned*, we know not: that it was designed to have *been spoken* on the opening of the present session of parliament, we collect from the title; and the information is by no means unnecessary; for, independently of such premonition, we could not have collected any such design from

any one page or any one expression that occurs in its entire scope. The right reverend author was certainly, at the date of its composition, unacquainted with the speech intended to be spoken from the throne, with its various topics and divisions; and hence, without pretending to relate specifically to any one circumstance to which it might advert, it embraces, with a sweeping circumference, the whole extent of our political situation, as well domestic as foreign, as well civil as military. That it contains much sound advice, much wholesome truth, and irrefragable reasoning, few can doubt, even antecedently to a perusal, who are acquainted with the writings of the learned compiler, and no one who has submitted it to a careful investigation. Yet we can scarcely believe that it will uniformly please any party, and, least of all, those of the high-church and the cabinet. Admitting, in effect, the truth of most of the propositions here advanced, we much question whether many of them be well timed; and we are confident that, if several of them were to be acted upon at the present moment, no small portion of that patriotic unanimity and ardor which is the peculiar boast of the right reverend speaker, under the immediate pressure of our calamities, would give way to party distinctions, to sectarian zeal, and ecclesiastical fermentation. But we are anticipating a conclusion which we ought to allow our readers to deduce for themselves.

The speech, in its exordium, descants with due and deserved animation upon the constitution of our country, and the high-spirited efforts evinced in its defence.

Is any one ignorant of these blessings? does any one think that he has nothing to fight for, that his condition is so mean and uncomfortable that, let what will happen, it cannot become worse under any constitution which may take place? Mistaken man! go and see if thou canst find in France—a trial by jury—an *Habeas Corpus* act—an incorrupt administration of justice—an equality of law—a security of life and property—a parochial maintenance for thy orphans and thy widow—and for thyself, when age or accident shall have unnerved the arm of industry? Blessings these! which the meanest Englishman so liberally enjoys, that he is apt to overlook them; which the greatest Frenchmen so eagerly desire, that they will ere long with swords in their hands demand them. The soldiery of France, of Holland, Switzerland, Italy, glutted at length with slaughter, satiated at length with plunder, will, ere long, begin to be ashamed, officers and men, of the part they have acted in this revolutionary tragedy of the world; they will at length make an atonement for the mischief they have done, and snap, at once, the despotic chains, which in a fit of faction, passion, and insanity, they have contributed to impose on their respective countries.

But be this at it may,—for there is little certainty in any political prediction, and least of all in mine.—permit me to congratulate your lordships and the nation on that military ardour which is every where excited. It is every where excited to such a pitch, that were our ge-

nerals commissioned to say to their troops, as the Jewish officers were obliged, by the law of Moses, to say to their soldiers before they engaged in battle—"What man is there that is fearful and faint-hearted, let him go and retire unto his house"—Not one in an hundred, I think, would retire from their ranks.

It has been said of Carthage—that all her citizens were merchants, mindful of nothing but of the acquisition of wealth:—and it has been said of Rome—that all her citizens were soldiers, mindful of nothing but of the acquisition of military glory.—The issue of our present struggle will, I trust, teach all future historians to say of Britain, that she united characters hitherto esteemed discordant, and incompatible, and combined for her defence the strength of Carthage and of Rome—that her soldiers were merchants and her merchants were soldiers. Had Carthage been, after the second Punic war, what great Britain now is, the exclamation of Cato (which our modern Catos, forsooth, have so vociferously adopted) the—*delenda est Carthago*—would have been considered by the Roman senate as an impudent gasconade, unworthy of its attention.

Let our enemies mark the difference between Great Britain and Carthage, to say nothing of that between Rome and France. We are not defended, as Carthage was, by mercenaries, seldom faithful, always uninterested in the event of war, and sparing of their blood.—We are not supported, as she was, by tributary states, impatient of our yoke, and watching for an opportunity to throw it off—We are not assisted, as she was, by allies, envious of our prosperity, and secretly hoping to benefit themselves by our downfall—better none than such allies!—No! we have no mercenary forces, no tributary states, no alliances; but we have more than an equivalent for them all,—a free constitution—the work of ages! the wonder of the world! the wish of surrounding states! the palladium which our ancestors have committed to our custody; which, whilst we possess it, will render us invincible, and which, whilst we have life, we have to a man determined to defend. p. 6.

The learned prelate then enters upon the subject of his harangue, which he divides into four parts, several of which, however, appear to have but little family connexion with each other. They consist of a new system of defence—a new scheme for paying off the national debt—a plan for relieving the Roman-catholics of Ireland—and an exhortation to a repeal of the Test and Corporation acts in favour of the dissenters of our own country. As to the right reverend speaker's new system of defence, we shall give it in his own words.

In the first place then, my lords, I am of opinion, that the first class of the people, adopting the division prescribed by a late act of parliament, should be called out and taught the use of arms, not merely as a temporary expedient to answer the present exigency, but annually continued as a permanent measure of the executive government. Unwise and defective is that policy, which is occupied in devising remedies for present evils, without extending its views to prevent the recurrence of danger. I readily join in the general praise so justly given to

the volunteers; but this commercial nation ought so far to become a military nation as always to have within itself a sufficiency of men ready disciplined for its defence. This may be completely effected for the present occasion in a short time: and when the pressure of the present occasion is removed, it may be established as a permanent measure in the course of six years, without giving any sensible interruption to our agriculture, our manufactures, or our commerce.

'The population of the country would annually supply, at least, fifty thousand youths, who in the preceding twelve months had attained the seventeenth year of their age; in six years we should have three hundred thousand young men sufficiently instructed in the use of arms. In the seventh year, fifty thousand of them might be dismissed, as *emeriti*, from further attendance on military duty, except when the country was invaded. Thus by a slight service of a few days annually, for six years, the whole nation (for no substitutes should in this arrangement be allowed) would at length become a nation, not of warriors, but of peaceful citizens, of all occupations and denominations, ready to become warriors, whenever the safety of their country should require the exertion of their skill and courage. Neither France alone, nor France with all Europe in her vassalage, would venture to set a foot on this island thus prepared to receive them: — Great Britain, single handed, would defy the world.' P. 11.

The deputy-lieutenants for our counties must smile at the ease with which our right reverend muster-master imagines he should be able, in times of profound peace, to coerce into public service not less than fifty thousand rank and file annually, which is equal to two-thirds of our entire militia—a body by no means maintained without strenuous exertions as well as multifarious complaints—and considerably more than equal to the whole of our standing army. Yet this number is to be recruited every year, till we are in possession of an unwieldy military force, independently of the standing army itself, of not less than *three hundred thousand men*; or, in other words, till we have accumulated a force competent to the aggregate of our volunteer corps at the present moment, and which is to be maintained in perpetuity. Our author says nothing of the expense of such a gigantic establishment, with a proportional military staff:—we would advise him to make the calculation, and he will be convinced of the *first* impossibility of carrying it into effect. He says nothing of the difficulty of executing it:—we would advise him to study this point also; and, from observing that the number he proposes to support in a period of profound peace precisely equalises that which the nation is barely able to muster at the present critical moment, strained to its utmost pitch, and with all its energies in action, to calculate how impossible, *in the second place*, it would be to perpetuate this system, when the same stimulus ceases to exist, and the menaces of Bonaparte are no longer heard. As, moreover, this mighty armament is not designed, it seems, to 'supercede the standing army,' but to

be 'subsidiary to it,' a *third* impossibility to the execution of the system may be deduced from the impossibility of maintaining such standing army, at least in its full complement, provided this new militia could be formed and continued on so extensive a footing. The learned prelate indeed observes, that such an establishment 'might greatly assist in recruiting the ranks of the regular forces;' and we remember that this same doctrine was very generally held in the senate upon the first introduction of the volunteer system: but the evidence of facts has clearly proved it to possess a directly contrary tendency; and of this tendency the ministry themselves are so fully convinced, that many of the exemptions granted to volunteers, in an early period of the service, have been long since withheld, and an entire re-modeling of the system is officially announced to be in contemplation. In fact, high as is the bounty paid to substitutes in the army of reserve—from which the regulars are now to be chiefly fed—and limited as is the duration of their service, the last six months have not added more than *six thousand* to the standard army; and, drained as the country is in consequence hereof, excepting by the introduction of new arrangements to remedy this erroneous opinion, three thousand more are as many as can rationally be expected to be added in the course of the six months ensuing. Could all these impossibilities, however, be surmounted, we next have to inquire as to the utility of so gigantic a military force. The commencement of the speech proves that the writer attaches every degree of credit to the powers and spirit evinced by the nation under its present system of regulation, and that there is not the remotest reason to distrust a successful issue, even could the enemy succeed in his threats of actually invading us: but if (without the trouble and expense of so prodigious a permanent force, could it at last be accomplished) we be able by our own voluntary and instantaneous exertions to defend ourselves against a more formidable danger than ever has been, and as formidable as ever can be, encountered, why have recourse to a plan which, upon the bishop of Landaff's own statement, is unnecessary, and which, upon the proof of incontrovertible facts, is altogether Utopian, and incapable of being carried into effect?

Upon the subject of paying off the national debt, we shall not enter into any detailed argument, as it is not new in the present pamphlet, having been adverted to five or six years ago in the present writer's very popular Address to the People of Great-Britain. We agree with him, that this would be a most desirable transaction, and highly profitable to every individual in the state, could he be persuaded to the privation which must necessarily ensue from the enormous income or other tax which would be necessary to realise it. But, highly as we approve of the admonition in theory, and as a general proposition, we

doubt its expediency during a period of war. Yet, whether doubtful or not, we are confident that no minister will be found bold enough to undertake the task; and we have little hesitation in asserting, that, were the learned prelate himself placed at the head of the cabinet, he would soon feel compelled to drop his very patriotic but too sanguine scheme. After all the speculations that have ever been devised for the extinction of the national debt, there is none, in our judgement, equal to that of a sinking fund—the grand and beautiful idea of which was first suggested by the late Dr. Price, reduced to practice by the late chancellor of the exchequer, and completed in its effective operation by an additional proposition of Mr. Fox, at the moment of its discussion in parliament, who, independently of the sum proposed to be set apart for the diminution of the old debt, advised the deduction of a per centage upon the substance of every loan itself, as a fund to extinguish progressively such future incumbrance.

In the counsel here offered to the upper house, with regard to the situation of Ireland, we most heartily, however, concur with our learned and liberal prelate; who, contrary to what has been expressly avowed by the present ministry, gives, in conjunction with Mr. Fox, full credit to the dying declaration of several of the late rebel chiefs concerning their utter abomination of all political connexion with the consular government of France. The point particularly laboured by bishop Watson in discussing the grievances of the Irish catholics, we shall submit in his own words.

One circumstance in the situation of Ireland, has always appeared to me an hardship, and that hardship still remains undiminished. I have always thought it an hardship, that a great majority of the Irish people should be obliged, at their own expence, to provide religious teachers for themselves and their families. I have the copy of a letter, in my possession, to the duke of Rutland when lord lieutenant of Ireland, in which I pressed upon his consideration, the propriety of making a provision for the catholic bishops and clergy in that country; and I have been assured by men, well acquainted with the temper of the Irish, that had such a measure been then judiciously adopted, a rebellion would have been avoided, and Ireland would long ago have been tranquillized. Whether the time for trying such a mean of tranquillization be now so passed that it cannot be recalled, I know not; but whether it be so passed or not, the measure itself, being founded in justice, is not unworthy the consideration of government. I love, my lords, to have politics, on all occasions, founded on substantial justice, and never on apparent temporary expedience, in violation of justice; and it does appear to me to be just,—that the religious teachers of a large majority of a state should be maintained at the public expence.

If you would make men good subjects, deal gently with their errors; give them time to get rid of their prejudices; and especially take care to leave them no just ground for complaint. Men may for

a time be inflamed by passion, or may mistake their pertinacity for a virtue, or may be misled by bad associates; but leave them no just ground of complaint, and their aberrations from rectitude of public conduct will never be lasting; truth and justice, though occasionally obstructed in their progress, never fail at length to produce their proper effect.

Justice, I think, may be done to the catholics, without injustice being done to the protestants. — The protestant clergy may continue to possess the tythes of the country; and the catholic clergy may be provided for from the public exchequer of the empire. I see no danger which would arise to the established church from some such arrangement as this; and it would, probably, be attended with the greatest advantage to the state. We think the catholics to be in an error; they think the same of us; both ought to reflect, that every error is not a criminal error, and that their error is the greatest, who most err against Christian charity.' p. 25.

Although we do not entirely accede to this express mode of redressing the grievances here complained of, we accede altogether to the principle. The late ministry pledged themselves to such principle at the period of the union; much of the animosity still subsisting has resulted from the non-fulfillment of such pledge; and, as nothing could tend so effectually to eradicate such animosity, and consequently to extirpate all hope of a successful invasion on the part of the first consul of France, as its liberal and plenary execution, the present is, above all others, the time in which it should be carried into instant accomplishment. We approve of the advice, as equally just, feasible, and politic.

It is equally just, also, that the dissenters of our own country, whose uniform attachment to the reigning family and the constitution, notwithstanding the transient ebullitions of party spirit which have been occasionally exhibited by several of their brethren, should be liberated from the restraint of the Test and Corporation acts, and have the political honours and emoluments of their native land thrown equally open to them. But however just, or even feasible, we believe such a conduct to be, we differ from our author in conceiving it to be politic at the present day. The dissenters are not, at this individual moment, expressing any prominent solicitude to obtain such relief: nobly and patriotically satisfied with the rights and privileges they actually possess, their only object is to concur with their brethren of the established church in providing for the security of that invaluable constitution which equally shields and blesses every sect and party that lives beneath it, and of which all may equally boast as their richest glory and inheritance. Such a conduct entitles them to every praise, and will, we trust, ere long, obtain for them the remuneration here recommended. Yet—we repeat it—we are sorry to see it recommended at pre-

sent, and especially by a prelate of such authority and influence as bishop Watson. The present ought to be a time of the most cordial unanimity: the agitation of the question before us would, we are afraid—for it hitherto ever has done so—destroy such unanimity in no inconsiderable degree. We would rather, we confess, transfer the consideration to the return of peace, when we heartily trust it will be resumed: and we are sure that every serious churchman ought to be as anxious, from reflecting on the profaneness and immorality which these obnoxious statutes too frequently produce, to wish for their repeal, as the dissenters can possibly be from any motives of political or state emolument. As the opinion of the late venerable president of the council may be serviceable in the future discussion of the question, we will offer it in our author's own words.

‘I will mention to your lordships an anecdote respecting this matter; for the truth of which I pledge my honour, and, in doing that, I hope that I may be permitted to expect full credit from the house. When the dissenters, a second time, petitioned parliament for the repeal of the Test act, I called, accidentally, upon lord Camden, then president of the council; and, in the course of conversation, asked him this plain question, suggested by the alarm which had been taken by some churchmen—“Does your lordship see any danger to the church of England from the repeal of the Test act?”—He answered, with an eagerness peculiar to himself when his mind was determined—“None whatever.”—If then I err in this matter, I err with the late lord Camden; and though I had not rather err with him, than be right with others, yet I neither wish for, nor know where to find, a better supporter of my sentiment.’ p. 30.

ART. XIV.—*Dissertations on white Swelling of the Joints, and the Doctrine of Inflammation.* By John Herdman, M. D. 8vo. 5s. Boards. Johnson. 1802.

MEDICINE is a liberal art; and a physician ought to be acquainted, not only with his own language, but with those in which the most valuable treasures of the science lie concealed. It was, therefore, with no little indignation, that we found, in this work, numerous mistakes in spelling and in grammar—idioms which no language admits: in short, marks of the most disgraceful ignorance of the most common attainments. We often pass over minuter errors of this kind, *quos aut incuria fudit*, &c.: but the frequent recurrence of these faults, in the work before us, degrades the author, diminishes our regard for the title he assumes, and sinks him to a level with the numerous practitioners who start from the shop to the college, and run their short race, without learning, without science, and

often without judgement. Yet, as doctors, they claim the public confidence, and (such is the folly of mankind!) often attain it.

This is a work which we should expect from such an author, a stream which may be supposed to flow from such a fountain. Dr. Herdman combats a shadow. He assumes as common practice, what has not been such within the period of our experience, which extends far beyond his years; and he reprobates, with severity, what physicians of learning and candour have silently rejected. He does this, not with the mild reprehension of true science, but with the violence of a modern reformer.

‘I have written the following dissertations, because I think that the subject of white swelling is ill understood, and the method of cure ill conducted. I have treated of the nature of scrophula, because white swelling is a scrophulous disease. I have examined the grounds on which white swelling has been divided into a scrophulous and a rheumatic species, because I think this division erroneous and unfounded in the nature of white swelling. I have treated of the doctrine of inflammation, to show that white swelling neither depends on a phlogistic diathesis, nor on any thing requiring antiphlogistic regimen and antiphlogistic practice. Finally, I have discoursed on the method of cure which should be employed in white swelling.

‘In doing these things I have had occasion to question long received opinions and practices. If I have criticised too keenly, let the importance of the subject plead my excuse. When the improvement of science, or the good of mankind, is in view, every thing else is out of the question.’ P. vii.

The first dissertation is ‘on the Nature and Cure of Scrophula,’ in which we find much vague declamation on the imperfect state of physiology, the uncertainty of pathology, on proximate and predisposing causes. Scrophula, he thinks, is hereditary; and he justly remarks, that it is not in the external form that the *seminum* of latent hereditary disease is exclusively to be traced. He seems to suspect that scrophula may be induced by powerful remote causes, without any original taint: but this is very uncertain, though it may be difficult to prove a negative. The great object of this dissertation, however, is to show that scrophula is a disease of debility, and that all evacuations, particularly the discharge from the bowels, are injurious. We cannot engage in any contest; but shall offer, in a few words, the result of some experience and reflexion on the subject.

The scrophulous disposition may be styled asthenic; but in a particular view. The lymphatic system of all young animals is disproportionally large, the glands tumid, and the circulation, through the whole system, peculiarly slow, and consequently, in the minuter convolutions of the vessels, subject to obstruction. The proportion of red globules in the blood is less—of serum and albumen, greater—than usual. In the bowels, there is a large quantity of mucus; and the action of the intestines is

generally torpid.—These are facts.—The first consequence to be drawn will be, that there is a deficiency of irritability in the lymphatic vessels, and of both irritability and power in the intestinal canal, including the stomach. If, then, we exhibit powerful tonics, we brace distended vessels; and nothing more certainly weakens them. This is proved by experience; for, though tonics be useful in scrofula, powerful ones, especially if not combined with laxatives, are injurious: added to this, the vegetable astringents, from continued use, are not without suspicion of a sedative power; and it is at least certain, that, from long employment, they lose their effect. Debility is not, however, the distinguishing feature of the disease: it is *irritability*; and warm cordial medicines are of more use than simple tonics. Whatever, also, may be the prejudices and fancies of some practitioners, we have certainly seen the burnt sponge, and the burnt cork, useful. The former contains an animal oil, and a volatile salt, which will probably stimulate the too inactive lymphatics; and the latter combines a peculiar acid with alkaline salt. It is a certain fact that both *are* of service in scrofula.

Dr. Herdman is violent in his invectives against purgatives. He contends that they weaken the system: but, if they discharge the cause of weakness, they may appear to strengthen; and, in reality, do so. Violent evacuations are certainly not useful: but an easy discharge, twice a-day, from the neutral salts, or salt-water, we know, from frequent experience, does not debilitate the weakest scrofulous child.

The second dissertation contains ‘an Examination of the Grounds on which white Swellings of the Joints have been divided into a scrofulous and rheumatic Species.’ This division was proposed by Mr. B. Bell, who found the white swelling occasionally preceded by violent pains of the ligaments of the joints. We neither approve of the term, nor of the diffuse description of Mr. Bell: but we must still more condemn the petulant and illiberal mode of attack in this dissertation. If it be a fact that white swellings begin with such ligamentous inflammations—which we know to be well founded—the distinction is important; and Dr. Herdman would probably not have objected to it, did not the term rheumatism countenance evacuations. On this subject, however, we must hereafter be more explicit.

The third dissertation comprises ‘the Doctrine of Inflammation, and the Causes and Nature of white Swellings of the Joints.’ In the first part of this dissertation, our author endeavours to prove that blows, strains, &c. never produce white swellings; as these are scrofulous affections only. He must, however, admit that these are sometimes exciting causes; and, where they prove such, we are apt to suspect the concurrence of

scrofula. Yet, as we shall find white swellings to be chronic inflammations, terminating in suppuration, we cannot refuse the influence of such exciting causes; nor can we deny that more active inflammation of the ligaments may be followed by a less active affection of a similar kind, in the joint itself, by whatever term either disease is designated. The disquisition on inflammation is designed chiefly to show that some kinds of inflammation are not owing to increased excitement, but rather to diminished action; and consequently that all inflammations are not rheumatisms, nor to be treated with evacuants. This was well known: but it is detailed at length in the jargon of Brown.

The fourth dissertation relates to the method of cure which should be employed in white swellings. The first part relates to bleeding, a discharge which has been generally procured by leeches; in our author's language, by 'leeching': but this and many other parts of the volume should be 'set to rights.' In the violent pains of the ligaments, with which the disease occasionally begins, leeches are undoubtedly proper: but, after this period, and when there is no such preceding inflammation, they should not be employed. The sneers at a very respectable practitioner (Mr. Bell) should, we think, have been spared, though we suspect he has carried the evacuant system a little too far. The next subject relates to purging. As this is a point at issue, we shall select the author's own words.

The functions of the stomach and bowels are generally imperfect. In the more early periods of the disease there is costiveness, and in the more advanced periods diarrhoea. But though these are apparently opposite effects, yet they arise from the same cause; they arise from imperfect function, from a sort of debility in the stomach and bowels. They must therefore be increased by every power that can produce a greater degree of derangement or debility; and therefore by laxatives of every description: for these powers must derange or debilitate the stomach and bowels, and in a degree proportioned to the degree in which they operate, proportioned to the degree in which they cause evacuation. Nor is this all; for while they operate they must interrupt or disturb the digestive process, and cut off the source of nourishment, as it were, from the system.

Now, for what reason, or on what principle, are laxatives administered? If they are administered to remove a phlogistic diathesis, there is no such thing to remove: if they are given to remove costiveness, it is a bad reason; for surely laxatives will not increase the tone or vigour of the stomach and bowels, and render their functions more vigorous or more perfect. Nay, that they produce a directly opposite effect is clear; for every repetition of the laxative requires an increased dose to produce a laxative effect. If the scrophulous body, labouring under white swelling, has every function languid and imperfect, how are we to expect a contrary state of the stomach and bowels? how can we expect that the bowels should be regular when every other function is irregular? Is it fair or right to force this function, because it is somewhat more in our power than any of the other functions? If the appe-

tite is bad, how can we expect a regular discharge from the bowels? Is it not reasonable to conclude, that the appetite must be improved before the economy of the bowels can become natural? Can any function of the body be healthful or natural when all the other functions are in a morbid state? But what is the result of this false pathology and this bad practice? To remove costiveness, laxatives are administered; every repetition of the laxative requires an increased dose to produce a laxative effect; every repetition of the laxative is followed by a greater debility of the stomach and bowels, by a greater want of appetite: the system does not nor cannot escape; the strength decays; every function becomes more imperfect and more morbid; hectic takes place; and the bowels pass from one sort of debility to another; they pass from that sort of debility which constitutes costiveness to that which constitutes diarrhoea.' P. 209.

Nothing can be more vague or more indeterminate than these remarks; for the probable state of the patient is in no respect noticed. Scrofulous habits have the bowels loaded with mucus, which is, in itself, a disease. This, undoubtedly, should be removed. Slight fever attends the suppuration of the joint; and nothing keeps the system more moderately cool, than preventing accumulations in the bowels, and the irritation consequent on accumulation. The declamation against the necessary increase of the doses of laxatives betrays either little knowledge, or superficial reflexion; since it is only necessary to exchange the remedy, and nature offers us laxatives in great profusion. Sometimes, he remarks, a natural diarrhoea supervenes. This, if not critical, is almost exclusively confined to the last stage, when restringents are certainly necessary. In every instance, the bowels should be kept easily loose. Salts may be alternated with castor-oil; sena and tamarinds with rhubarb. The one, which has been discarded after having lost its effect from habit, will recover it again, when the next has, in its turn, become habitual, and less effectual.

The management of temperature has certainly not been well explained; and the directions, in this respect, must be relative also. Our author does not regulate it with great judgement. Logic is too much neglected, even at the universities: but it certainly is not attended to behind the counter.—*Ecce signum!*

It is impossible to understand the doctrine of the tonic power of cold; and the very language concerning cold bathing, if rightly understood, condemns it. The patient is told, that if he feels a warm glow on coming out of the bath it will do him good; but if the glow does not immediately take place, if he remains cold and chilly, it will do him harm. The latter assertion is true, and the former false. If he remains cold and chilly, with other symptoms of debility, it is a positive proof that the bath does him harm; but, because the glow takes place, it is no positive proof that it does him good. If his body be comparatively strong and vigorous, if he be not much debilitated, he can bear the abstraction of heat; on coming out of the bath, re-action, as it has been

termed, immediately takes place; the lost heat is soon reproduced; and on putting on his clothes, a genial glow is diffused over his whole body: but if he be considerably deranged or debilitated, with every function languid and feeble, by the abstraction or deficient action of heat he is farther debilitated; re-action does not take place; the lost heat is slowly reproduced; he remains for a considerable period cold and chilly, with many other symptoms of strongly marked debility. The glow therefore is no positive proof of good; it is only a proof that the body has suffered no harm." P. 217.

What all this *verbiage* is intended for, we can easily see: but what has it proved?—if words have any meaning, the very position which our author combats. He adds, 'in this reasoning there can be no mistake.' We think not; and are, therefore, only surprised that he should have made the only possible mistake; *viz.* thinking that it has any connexion with his subject. The cold bath, he observes, has the same temperature for all; for the strong and the weak. Really! this is, indeed, a discovery. Has the sea the same temperature at all times? Are the baths of Buxton, at 82° , never employed? Is not sea-water sometimes artificially heated to 50° , 55° , and to different degrees between these and 82° ?—Dr. Hamilton doubted the efficacy of sea-water in scrofula, because the disease was common at Lynn. But the situation of this town is low, damp, and marshy. We know that, except in similar situations, the disease is not common by the sea-side: we know, too, that alternately bathing, and drinking salt-water, is a powerful remedy in scrofula, let the Brunonian system say what it may. Yet we may add that Bath waters are sometimes serviceable, especially in what are styled hip-cases, *viz.* a relaxation of the ligaments of the femur. The high degree of heat in the Bath waters, independently of any impregnation, undoubtedly renders their application an active stimulus.

Our author next proceeds to the local applications in white swelling; and he rests chiefly on heat; not trifling fomentations, but '*imbedding*' the joint in a decoction of chamomile flowers*, and very properly enjoining absolute rest. Mercury, in moderate quantities, introduced by absorption, may also, in his opinion, be useful.

Blisters he seems not to depend on: yet the repeated application of blisters we have found very effectual in many cases. The continued irritation of warm plasters, he supposes, will be useful; and he seems not to object to Mr. Ford's remedy of the caustic issue. Repeated blisters, in our hands, have answered so well, that we have not been tempted to try the latter. We fully agree with the author, that joints and scrofulous tumours

* From the term *imbedding*, we suppose the chamomile flowers must remain on the decoction, forming a kind of cataplasm to retain the heat.

should not be opened; that the anchylosis, preserving an useful and 'seemly' limb, may, and often does, take place; and that amputation, when necessary, is a delicate and difficult question, and, as such, ought to be left to the judgement of the practitioner. It is equally prudent to avoid amputating too early, while a limb can be preserved; and to defer the operation till a wasting hectic has destroyed the strength, and undermined the constitution.

On the whole, we think this a very insignificant work in a medical view, and disgraceful to the author in a literary or scientific one. Among numerous imperfections, we may add, that, in no part, do we find the swelling of the knee in question distinguished from other tumours of this part. As, from our author's very diffuse style, there seemed no anxiety to save either the purses or aching heads of his readers, we are a little surprised that a definition and diagnosis are omitted.

ART. XV.—*A plain Answer to the Misrepresentations and Calumnies contained in the Cursory Remarks of a near Observer. By a more accurate Observer. 8vo. 2s. 6d. Stockdale. 1803.*

ART. XVI.—*Observations on a ministerial Pamphlet, entitled, Cursory Remarks of a near Observer upon the State of Parties during the Administration of the Right Honourable Henry Addington. By an anxious Spectator. 8vo. 2s. Ginger. 1803.*

IT sometimes happens that a pamphlet, and especially upon political subjects, like a full-blown bladder, or a paper balloon, rises into notice by its own specific levity and intumescence; and the public gaze is still more widely excited, if it ascend from a marked and conspicuous eminence. Thus seems it to have happened with the '*Cursory Remarks of a near Observer*,' that are become the object of the two attacks before us, which, as relating to one and the same point, we shall consider in one and the same article. Not having hitherto perceived, with the best pair of spectacles in our possession, any very peculiar or prominent merit in those '*Cursory Remarks*,' and convinced that they were nothing more than *cursory*, we contented ourselves, a short time since, with *cursorily* noticing them in the order of their publication. We discerned, indeed, a pompous pretension to official information: but the information communicated was trivial and insignificant; and, although we were given to understand that it was a boasted production of the treasury, we in vain looked for intelligence beyond what the columns of our newspapers had furnished us with. We beheld, moreover—but this, also, was nothing new, and especially in

the quarter whence it proceeded—that every politician, who, whether from caprice or conviction, had in any measure chosen to oppose the existing ministry, was loaded with opprobrious imputations, and conceived to possess a weak head or a malevolent heart. It is on this last account that the pamphlets before us have made their appearance—*hinc illæ lacrymæ!* It is not to be tolerated, it seems, that the political honesty of lord Grenville should be called in question—that Mr. Pitt should be regarded, in the treasury itself, as ‘officious’ in his friendship, and ‘perfidious and unprincipled’ in his opposition—that Mr. Windham should be represented as a ‘man of place, a man of time, a man of circumstances, a man of convenience’—or that Mr. Canning should be contemplated as the mere tool and mouth-piece of the late chancellor of the exchequer. In the short notice we took of the ‘Cursory Remarks,’ we hinted that the writer appeared, nevertheless, in some measure, tender of the reputation of all parties, although he discovered a manifest inclination to the existing ministry; and that, however ill he might succeed in his efforts, he aimed at impartiality and independence: hence, while he shot his arrows at the ex-ministers, he endeavoured to soothe the wounds he made, with the balm of occasional panegyric and flattery; while even Mr. Addington himself was not altogether suffered to escape from slight disapprobation and censure. Upon this plausibility of conduct, our ‘More accurate Observer’—himself, perhaps, an ex-dependant upon the treasury—offers the following remarks:—

‘It is usual among these writers to cast a veil over the intention to praise or to condemn, except as the most rigid truth dictates. The “Near Observer” has not forgotten this decent custom;—his veil, however, covers, but does not conceal. It is of curious workmanship, wrought with some ingenuity, but of so thin a texture, that a distant observer may see without difficulty the specks and deformities which it is intended to hide. I should not, however, attempt to remove this veil, or to point out the malevolent spirit, and the misrepresentations which pervade the “Cursory Remarks,” if they had not been ushered into public notice with a degree of solemn and confident assertion, upon delicate and interesting points, well calculated to make an impression, and if these misrepresentations, glaring as they are, had not received a sanction, likely to induce the public to give them credit. It is true, they are the assertions of an anonymous writer; but let it be recollected that some of them relate to transactions of a confidential nature, in which the ministers took a principal part; and when those in his confidence assist in the circulation of the work, they by that act lend their name and authority to the principal statements which it contains, and express their sense of the propriety of its publication.

When the Near Observer thinks (most mistakenly) that it would have been so easy for Mr. Pitt, to have controuled and guided the parliamentary conduct of Mr. Canning, it will not be thought unreasonable in me to suppose that Mr. Addington may have some influence

over the conduct of the secretaries of the treasury; and when I am told that Mr. Addington has been neutral, that he has even expressed his disapprobation of the pamphlet which I am noticing, I ask whether neutrality is justifiable upon such an occasion? I ask in what school that morality has been learnt, which teaches us to permit others to promote that, which our own conscience obliges us to disapprove and to condemn? P. 2.

The chief causes of complaint against the writer of the 'Cursory Remarks,' in his attacks upon the late ministry, are then brought forward, and detailed in the following list:—

'The time, the manner, and the occasion, of their quitting their official situations;—the promise given and withdrawn, of "constant, active, and zealous support;"—the circumstances of the negotiation for the return of Mr. Pitt into office;—and the general conduct of these persons in parliament.' P. 5.

We cannot be supposed to follow this 'More accurate Observer' through the whole of his defence thus systematically arranged. In the first place, we have neither space nor time; and, in the next, we do not perceive that we could thereby present any thing of peculiar force or novelty to our readers. The respondents are both of them engaged in a most difficult task, considering the very opposite lines of conduct that have been pursued by Mr. Pitt and his late colleagues, since their secession from office. If lord Grenville and Mr. Windham have been right in condemning the preliminary and definitive articles of peace, and execrating the entire line of conduct pursued by the present ministry, Mr. Pitt must have been wrong in approving the peace, and in offering them his general, and, indeed, with two exceptions alone, his uniform, support. Both the writers succeed far better in pointing out the errors of the present, than in defending the rectitude of the past, administration; in belabouring with foul and abusive reproach Mr. Addington, lord Hawkesbury, and Mr. Tierney, than in proving that many of the epithets applied, by their antagonist, to their own friends, are uncharacteristic and inappropriate. Our 'Anxious Spectator,' indeed, in the abundance of his zeal to serve his patrons, seems to travel a little beyond the limits of his own record, and to take up the cudgel even in favour of Mr. Fox: but our readers will readily conceive that to this act of supererogation he is merely instigated, because Mr. Fox happens also to have been aspersed, in his turn, by the occasional venom of the 'Near Observer.'

The next, and probably the last passage, I shall have occasion to notice in the *Near Observer*, is as follows: "I am not aware of more than one case in which Mr. Fox and his minority could be considered as a possible administration, and that is the success of the invasion, or some other great disaster which should lay us at the feet of France. He

might, perhaps, be the vice-president of the Britannic republic, but there is little prospect of his ever being the minister of an English king." Thus while the ministerial organ pronounces Mr. Pitt incapable of serving his majesty, and that for a cause which should rather endear him to his country, he excludes Mr. Fox without assigning any cause. I shall not condescend to dwell on the invidious and unworthy insinuation the Near Observer has thought proper to utter against the character of that truly great man, nor risk to offend the good and wise by offering to justify a reputation which they know stands far above reproach. Nor let me here be charged with inconsistency, or what is worse, with flattery, if when I express my respect and admiration of Mr. Pitt, I offer my tribute of praise to Mr. Fox. I have long considered these two great statesmen, though often different in detail and placed on different sides of the House of Commons, as in the main agreed—that they both loved their country and wished alike to save it! The untried theories of France, which, setting the human mind afloat without the compass of experience for its guide, obliged the wisest men to take the road of speculation and experiment. Hence it happened, that Mr. Fox and Mr. Pitt pursued the same end by different means; the one rejoicing, that an oppressed though enlightened people had shaken off their chains; and viewing nothing in the perspective but his beloved liberty, with all the glowing philanthropy of his soul he hailed her at a distance, while as yet he could not discern the monsters that lurked in her train; and said, "let us have peace!" the other, dreading that anarchy too frequently the attendant on great revolutions, and alarmed at the visionary system of equality, which then began to infect the mass of society with its disorganizing principles, gave his voice for war.' p. 41.

The point, in the conduct of the present cabinet, most successfully objected against, is the administration of Ireland, the *surprise* or *neglect* which was manifested by the government on the eruption of the late rebellion—and which we now know, from a late speech of Mr. Fox in the lower house, to have been the former—and their refusal to carry into effect the pledge which is here admitted to have been given by the late cabinet, and which forms the ostensible grounds of their resignation—of remedying the more prominent grievances complained of by the Roman-catholics.

'I have no pleasure in dwelling on the derangement of commerce, the ruin of manufactures, the burdens of the people, and the other necessary consequences of war; but there is a circumstance I must beg leave to dwell on; a circumstance which, though immediately connected with and springing from this war, is not a necessary consequence of war; a circumstance which ministers were bound, and I believe might have provided against; I mean the present deplorable state of Ireland! In vain was it that the late ministers had accomplished the arduous and salutary measure, the union of the kingdoms! In vain was it that they pledged themselves to act upon the union, and remedy the evils of that unfortunate island! when their successors, regardless of those engagements, suffered the hopes of Ireland to expire

at their birth. To what other cause are we to attribute the disgrace and disaster of the 23d of July? Had ministers not manifested a cold neglect of Ireland, turning their back upon her, and fixing their eyes on the east, like the ancient magi, would rebellion have shewn its daring front in the capital, or have organised itself throughout the whole extent of the country? for I believe this to be the fact, however ministers, to cover their own neglect, may affect to think that the evil extended but a short way, and was confined to the wild attempt of a rash fanatic! Had that wild attempt succeeded, (and it was Providence, not human prudence, that arrested the blow,) ministers ere now would have been convinced of their fatal error, and Ireland would have flowed with rivers of blood. Such are the blessed fruits of the last peace, and its necessary consequence, the present war! a war, which induced the desperate and the despairing to resolve to throw themselves into the arms of the common enemy, and embrace the dreadful alternative of separation or destruction! a war, which obliges us to guard with military force, and to govern by military laws, those who might be our fellow soldiers and who should be our fellow citizens! a war, which, changing Ireland into a hostile land, obliges us to consider our fellow-subjects our greatest enemies! Did the fever of the public mind permit the deluded people of Ireland to listen to the sincere council of one who feels no small interest in their welfare, I would advise them to lay aside their wild projects, which, if successful, would only lead to their further ruin, and to look with patience to that day, which perhaps is not very distant, when their cause shall have a fair hearing at the bar of the imperial parliament, when they will have no longer to contend with individual interest or party prejudice, when protestant ascendancy shall be christianized into humanity, and all invidious distinctions have an end.' P. 34.

Who is to bring this important question forward, we know not, unless it be Mr. Fox, or the bishop of Landaff; for we agree with the 'Near Observer' himself, that it can never be advanced by any member of the late cabinet; who, were they at this moment to return into office, would run no small risk of being again displaced by the agitation of such a question alone. The fact seems to be confessed, that, in adjusting the terms of the union, the ex-ministers never consulted his majesty's pleasure, and inadvertently pledged themselves to engagements which, whether right or wrong, were afterwards disapproved by the king, who did not even feel himself at liberty to carry them into effect. This, with regard to his majesty himself, is strictly a case of conscience; and, as such, a case of the utmost importance to his own future peace of mind; and, whatever may be the public opinion upon the case itself, every one must perceive the indelicacy, on the part of the late ministry, of driving a sort of Smithfield bargain concerning Ireland with the king's conscience in their pockets, determined to dispose of it as the price of their purchase, without his majesty's consent, or even knowledge.

We hope sincerely that this war of the treasury against the

treasury will now subside. It is, in every respect, dishonourable to the parties engaged in it, and mischievous to the people, who are the spectators; who, from the manner in which they behold clerks accusing clerks, and ministers accusing ministers, of venality, incompetency, malice, meanness, and perfidy, cannot but conclude, respecting both of them, with Churchill, on a former occasion,—

‘ That all the diff’rence, after all this rout,
Is that the one is *in*, the other *out*. ’

ART. XVII.—*A Treatise on the morbid Affections of the Knee Joint.* By James Russell, F.R.S.E. &c. 8vo. 6s. Beard, Longman and Rees. 1802.

WE have read with great pleasure this very accurate and instructive treatise. The perspicuity of the descriptions, the precision of the distinctions, and the justness of the remarks, render it, in our opinion, a very valuable work. The author first speaks of superficial injuries, and remarks, that, when the integuments are removed, so as to lay bare the ligaments, the wound heals slowly. Bloody tumours—*viz.* those tumours which arise from a sanguineous effusion, too deep to show their origin from the discoloration, and which are consequently not opened—heal also very slowly. A tumour of the bursæ mucosæ is often mistaken for a phlegmon; and Mr. Russell gives some very judicious marks to ascertain the real nature of the swelling. The disease called the ‘white swelling,’ from its being unattended with inflammation, is very carefully and particularly described, from dissections of limbs in its various stages. It is evidently a disease of the capsular ligament in its early state, and attended with inflammation; but the disease is gradually communicated to the head of the tibia, the cartilages of the joint, and by degrees to the patella and the femur: the fibula seems never to be originally affected. The femur shows few striking marks of disease; but it is thinner than usual, and the muscles are white and flaccid: the patella wastes, and is, at last, almost obliterated. The following distinction should be generally known.

‘ But, in the determination of the essential practical question, whether the sensation proceeds solely from the fluctuation of a fluid contained within the capsular ligament, or solely from the undulation of a soft mass situated wholly exterior to it, we can often form a confident judgment. When a fluid lies within the capsular ligament, it may be made to undulate distinctly from one side of the knee to the other, passing under the patella. The patella necessarily rises during the passage of the fluid, especially if the leg be extended; hence the motion of the fluid, along with the elevation of the patella, mark the

place and nature of the complaint distinctly; for, when the appearances are occasioned by a soft external swelling, there is no such motion communicated from one side of the knee to the other; no elevation of the patella; on the contrary, the patella, so far from being elevated, is rather depressed, somewhat below the level of the surrounding parts, so that there is hollowness, or at least a flatness, at the place where it ought to be prominent. By attending to those circumstances, a sensation which might seem to proceed from a fluid collection, will be known to arise from the undulation of an uniform mass of soft matter. r. 27.

That kind of white swelling which begins with violent pain is noticed, as well as another variety, where, as in hip cases, there is rather relaxation than rigidity. Indeed, in general, our author remarks that the rigidity is more apparent than real, arising from thickening of the ligaments and surrounding parts. We are surprised, however, that he does not mention the peculiar sense of crackling, not that which would result from a hardened ligament, but from a dryness of the cartilages in consequence of a deficiency of sinovia. The discharge or the contents of the joint are seldom purulent, but consist of a whitish fluid with little round bodies interspersed. These are strong marks of a scrofulous affection; and Mr. Russell thinks the disease of this kind.

We shall proceed to the author's observations on the cure, though in a different part of the work, that the subject may not be too much broken. Mr. Russell considers, we have said, the white swelling as a scrofulous inflammation; but we do not perceive his directions to be adapted to this disease. He considers the complaint as a chronic inflammation; bleeds at first with leeches, though with few; applies saturnine lotions; keeps the bowels moderately open through the whole complaint; and enjoins abstinence from all animal substances, except jellies. In that variety of the swelling, where the enlargement comes on at once, especially when, in consequence of a bruise or strain, bleeding or saturnine lotions have no effect. A blister, however, soon completes the cure. Indeed, though our author mentions stimulating applications, the cataplasm consisting of gum-ammoniac moistened with vinegar of squills, &c. yet he seems to depend chiefly on blisters kept in a discharging state by sabine ointment.—We have found more benefit from their repeated application.—Should small bleedings and saturnine lotions fail, he recommends warm applications, particularly the steam of a decoction of chamomile flowers. The insertion of issues he has not found so useful as the French practitioners have asserted them to be; which he attributes to the milder form of scrofula in France. The caustic he does not mention. Opiates he allows, and vegetable acids should they not disagree with the bowels; but, if they induce or increase

diarrhœa, Mr. Russell would substitute the mineral acids. Passing a seton through the knee-joint, our author strongly condemns; though, in an instance of the highly painful swelling of the joint, opening the cavity succeeded in instantaneously removing the pain. This operation, attempted without any particular view or object, our author does not recommend; but its success may at least lead to a conjecture, whether the violent pain may not be owing to a flatulent distension of the ligament.

That form of the disease, which consists of a soft swelling over the knee, is generally an abscess, the internal surfaces of which are in an unhealthy state. Such abscesses seldom heal kindly; and, of the different plans of cure by producing irritation, a seton passed through them our author thinks the best. The remarks on amputation, and the period when it is indispensable, are considered very attentively; and Mr. Russell's decision is judicious and correct. For this, however, and the minute observations, we must refer to the work.

Simple inflammation of the knee-joint, the next subject of remark, is only of particular consequence when the constitution has a scrofulous taint. It may, in that case, excite the peculiar inflammation of white swelling. Should there be no previous taint, suppuration of the joint itself is slowly cured. Gouty and rheumatic inflammations, as is well known, seldom terminate in suppuration. The cure is not peculiar. Blistering, our author does not recommend, except where there is a purulent collection in the knee-joint, as it interferes with the more useful remedy, topical bleeding. When matter has formed in the joint, it should, in Mr. Russell's opinion, be opened as soon as the inflammation is so much subsided as not to admit of further irritation from the wound.—The chapter on the cure of gouty and rheumatic inflammations offers nothing particularly new.

Dropsical swellings of the joint are either the effect of weakness—in which case they are cured on recovering strength, and by astringent applications—or of scrofulous and syphilitic affections. These last must be treated with the appropriate remedies; but the scrofulous dropsy, though it may be removed by repeated blistering, is liable to recur while the disease exists in the constitution, which of course must be combated by proper medicines, if such there be. The water may be safely evacuated, if the distension be so great as to render it indispensably necessary. In this operation, and in opening the cavity of the joint to discharge purulent matter, no tent, or any thing that can occasion irritation, should be employed.

The following chapter contains a description of an 'uncommon disease' of the knee-joint, which the author did not see in its early stages, but of which the appearances, in the latter

period, are carefully described, with the dissection. We shall copy the most important parts.

‘ At the time of examination, the swelling was of a very large size, an irregular shape and firm consistence. There was no distinct sense of fluctuation communicated to the touch. But by applying gentle pressure over the whole surface, it was easy to discover that the different parts of the tumour possessed various degrees of firmness. There appeared to be a perpetual and progressive increase of size, though the violence of the pain and the general irritability of the tumour, were by no means proportioned to the magnitude of the other symptoms. Even after they had attained a size far beyond what a case of white swelling ever attains, the pain was not so severe. The accompanying symptomatic fever likewise was much more moderate. In rapidity of growth, however, they far exceeded any other species of swelling, as the most remarkable case which fell within my observation, arrived at its *acmé* in the course of five or six weeks. It was then indeed of a most extraordinary size, measuring, in the circumference of its largest dimensions, twenty-eight inches. At this period it is true, the symptoms were exceedingly distressing, and the patient suffered under the pressure of hectic fever. In none of the cases, however, was there any superficial redness of the skin, or any other symptom of inflammation.

‘ Such are the external appearances of this singular complaint. When the substance of the mass is cut into, to discover the nature of the internal structure, it exhibits appearances obviously different from those which are to be found in many other affections of the knee. The state of the bones, in particular, bears the most marked distinction of character.

‘ The head of the tibia is principally affected. In some cases, it suffers a very considerable enlargement, and in others it appears to be wholly consumed. When it is enlarged there is not so much an increase of substance as a separation of the lamellæ of the bone from one another.

‘ The bone being thus so much extended, without acquiring any addition to the quantity of matter, it very much resembles in structure a piece of honeycomb; and, from the large size of the spaces, in proportion to the small bulk of the materials, it becomes exceedingly fragile. Whether this great degree of fragility arises solely from the change in its mechanical structure, independently of any morbid affection of the parts, is a point which I cannot as yet determine with accuracy. Though I am inclined to believe that the bone is also otherwise diseased, since, upon endeavouring to make a dry preparation of a case of this kind, the whole enlarged portion of bone crumbled to pieces, and, in a short time, nothing remained but that part of the tibia which had not been affected with the disease.’ p. 71.

The fibula suffers with the tibia, and the soft parts become transparent, colourless, and gelatinous. The disease was incurable; and even amputation did not succeed; for, a few days after the operation, when every thing seemed in a prosperous train, a violent and unmanageable hæmorrhage closed, in every instance, the patient’s life. The chapter ‘on move-

able Bodies found within the Joint, contains nothing particularly new.

Observations on the bursæ mucosæ, and on ankylosis of the knee-joint, only remain. The former offer nothing of peculiar importance. If the tumours of the bursæ cannot be repelled, they may be opened; and the sore, though unclean and tedious in healing, will at last unite. If, however, the constitution be scrofulous, and the inflammation considerable, the operation adds a considerable degree of irritation, and amputation is immediately necessary. The remarks and description of different kinds of ankylosis, do not admit of abridgement.—The volume concludes with some formulæ, two plates of ankylosed joints, and a view of the joint affected with the 'uncommon disease' above described.

MONTHLY CATALOGUE.

FINANCE.

ART. 18.—*An Investigation into the Principles and Credit of the Circulation of Paper Money, or Bank Notes, in Great Britain, &c. Together with a Discussion of the Question, whether the restraining Law in Favour of the Bank of England from paying Notes in Money, ought or ought not to be continued as a Measure of the State? By William Howison, Esq. 8vo. 1s. 6d. Stockdale. 1803.*

THE question of paper-money has been feelingly agitated in France and America: it has been the subject of discussion in the British parliament, and of various publications through the nation at large. Little novelty can, therefore, be expected from the present investigation: yet it may be added to those by sir F. Baring, Messrs. Boyd, Friend, and Thornton; and the reader who, from those writers, has not already made up his mind, will derive, from the work before us, every degree of information that can be required on either side of a question replete with present inconvenience, and, very probably, with future misery, to the public. The strange solecism of a government permitting to a private company the privilege of coining money, is thus pertinently noticed:—

'The bank profits at the loss of the public creditor, and other holders of notes in circulation, in a sum equal to the extent of the interest of the sum in circulation, which, from the account laid before parliament in February 1803, amounts to no less than 16,108,560*l.* affording to the bank, without any value whatever to the public, an annuity

of 805,428*l.* being the interest of the circulating paper at five per cent. Here is an additional tax levied on the community to the bank proprietors: and accordingly we have seen the same distributed in increased dividends upon bank stock, and divisions of accumulated profits, to the proprietors, while the price of every other public fund has been much depreciated.' P. 15.

Another extraordinary circumstance, in the present delusion, attending paper-money, is, that, while the value of bank-paper rests on the authority of government, and this paper itself bears no interest, it is taken preferably to exchequer bills that do bear an interest. A good solution, however, is advanced for this paradox.

'The securities of government are only to be obtained for value. The notes of the bank of England are obtained in loan without value, by credits in the bank books, or discounted bills. In this manner they are connected with enterprise; they get equally into the hands of individuals, who have no corresponding property, as into the hands of those who have property, and who otherwise could not be possessed of them. Enterprising individuals, in order to possess themselves of property, obtain notes through such loans and credits; and, to repay these notes, exchange the property with other notes, or with other property. This is done sometimes with benefit to the community, as in creating exchange of commodities and competitions, and sometimes with disadvantages, as in cases of insolvency. But still there must be confidence in the paper; and how that confidence should become greater in the paper of the bank of England, as capable of being circulated to a greater value, than in the paper of government, does not appear to be easily accounted for otherwise.' P. 31.

The evils attendant on the present system have been too often laid before the public to create any new anxiety. They are again forcibly enumerated by this writer. Every one who views the subject without prejudice, or interested motives, will probably agree with him in opinion: but the fears of the people, which laid the foundation for that miserable political step—the stoppage of the bank—without a consecutive declaration of bankruptcy, have subsided into total apathy; and every one flatters himself that the bubble will not burst in his time.

'Excessive circulation of bank notes beyond the only possible criterion, their convertibility into gold, which the restraining law has done away entirely, would, from the preceding observations, so far as they may be just, appear to be attended with much injury to the community at large in various respects; more particularly, first, in bringing the public under contribution of an annuity to the banks of a million and half, equal to the interest of thirty millions of estimated circulating paper, without any value whatever—this sum in real money formerly would have been equal to the expense of a campaign in war: secondly, in the diminution of the fixed income of every individual in the state, of one half, or at least of a third; and of course in a proportional deprivation of his comforts: thirdly, in increasing the difficulties to agriculture, to manufactures, and to commerce, by enhancing capital and interest employed in them by raising the prices of labour and commodities, and by diminishing the consumption: fourthly, in

increasing the evils of an unfavourable course of exchange with foreign countries: and finally, in laying the foundation for, and leading directly to, a general explosion of all confidence founded on paper credit; and which may be attended by the ruin of many individuals at least, if not by public confusion.' P. 47.

After this true statement, our author may well ask—

How is individual capital to bear up against the influence of paper circulation, which has no control, or exist against the operations of a banking company, which, the one day, could not conduct its own affairs within the rules of the consistency or prudence required from individuals; and which by the act of the legislature, is enabled, in a few days after, to lend to government fifteen millions of money! P. 56.

He points out, too, an inconsistency in our statute-book.

In one chapter, the wretch, to whom a shilling is necessary, perhaps to his existence, is declared a felon, for throwing upon society a fictitious shilling or note; in another, a favourite company is privileged to throw millions, against the influence of which, in every affair of life, no capital, nor no [nor any] virtue, can give protection, either to the community, or to the individual. The blame, in such a measure, cannot with justice be imputed to banks: but it must rest with those with whom it originated, and the demerit of it with those from whose authority it emanated.' P. 57.

Many other observations might be selected from this pamphlet, which show the author's intimate acquaintance with his subject. His reasoning is conclusive: but the bank will, nevertheless, continue to make a profit of nearly a million of money annually, by the permission of the legislature, independently of its additional profits by discounts; and, however a man may reason, and however he may hold the paper project in abhorrence, he must either go without food, or contribute to the support of this very system, by the receipt and transfer of bank paper-money.

ART. 19.—*Thoughts on the Restriction of Payments in specie at the Banks of England and Ireland.* By Lord King. 8vo. 2s. 6d. Cadell and Davies.

The effects of paper-money have been dreadfully exemplified in France and America, although Great-Britain has not hitherto felt them in so disastrous and calamitous a manner; yet, to a considerate and impartial man, these baleful effects are even here discoverable in the gradual depreciation of money, in the increasing profits of the bank, in the ascertained fact that it is a gainer of nearly a million annually by the permission from government to coin paper-money. It may be asked, how can such a delusion be maintained, when the most ignorant of mankind must see through the imposture? It might as well be asked, how could the system of indulgences be at one time maintained, and Rome drain all Europe of its cash in return for waste paper? There is no delusion that may not, for a considerable time, stand its ground, in opposition to the dictates of wisdom and the interests of the bulk of the

people. The whole body of the priesthood was a gainer by the sale of indulgences: the bank, by its discounts, is to the commercial interest what Rome was to the body of the ancient clergy. Argument, in either case, is, for a time, of the same nullity; and the spirit of a Luther is not likely to emanate from souls immersed in the lucrative arts of trade.

If argument were of any avail in this question, the excellent pamphlet before us would at once destroy the whole of the present base-paper system. The delusion is, in these pages, completely detected, the fatal effects of it pointed out with a prophetic spirit: and the distinction between the advantages of paper controuled, and the disadvantages of that which is uncontrouled, is shown in a manner that appears to us demonstration. Paper-money is of vast utility: business is, by this easy mean, conducted with great facility and dispatch: nor is it liable to any abuse, so long as the paper is the representative of something real, so long as the person who holds it knows that he can, in an instant, exchange it for substantial coin. The moment this possibility of exchange no longer exists, the door is opened to every species of fraud; the power of coining paper into money, without limitation, cannot be given to beings framed as mankind are, without a certainty of abuse, and an injury to the community.

This supposition is frequently repelled by an appeal to the personal character of those who superintend the conduct of the bank; and the noble author, aware of the effect of such a mode of reasoning, brings, in opposition to it, a conclusive argument. He cannot acquit the directors of the bank of Ireland of the charge of gross misconduct; and as, on similar occasions, 'an appeal is made to the personal merits of—

—those who are the subject of the charge; but this defence, though in these cases perhaps the most frequent, is of all others the least conclusive and satisfactory. It is an unfortunate but most unquestionable fact, that the standards of public and private morality are in many minds extremely different; and that, when acting as members of public bodies, men are often found to acquiesce in measures and even to avow principles which they would acknowledge to be dishonourable in common life. The restraint of public opinion, one of the most effectual securities of human virtue, is much diminished on those occasions where we act in concert and conjunction with many others; and, as applied to the proceedings of corporate bodies, for which no individual member can be responsible, it seems to be altogether without influence. If to these considerations we add, that the transactions of the Irish bank have hitherto undergone no public inquiry or examination, and that the account of their notes has now for the first time been required by parliament, we shall be at no loss to explain the reasons why the public conduct of the directors has been so contrary to those principles of honour and good faith which they probably maintain in private life. "All men," says Mr. Burke, "possessed of an uncontrouled discretionary power, tending to the aggrandisement and profit of their own body, have always abused it; and I see no particular sanctity in our own times that is likely by a miraculous operation to overrule the course of nature."

' Whatever may be our opinion respecting the propriety of conti-

nuing to the directors of the bank of England the present unlimited powers which they possess under the act of suspension, yet experience has clearly shewn that the directors of the Irish bank are altogether unworthy of this confidence; and that it is of the greatest importance to the commercial and monied interests of that part of the empire that the currency of that country should no longer be exposed to a continuance of the present abuses.' p. 54.

The characters of directors must be placed out of sight, then, when we investigate the nature of their measures; nay, the general merit of that character is a greater misfortune to the public. Persons of inferior worth could not commit gross acts of fraud with impunity. The evil is to be considered in itself; and if, by men of generally esteemed probity, it have been countenanced, what greater and more baleful effects may it not produce, when the temptations to plunder the public are increased, and the virtue to resist them is diminished.

'A law to suspend the performance of contracts has been suffered to remain in force upwards of six years. A power has been committed to the directors of the bank, which is not entrusted by the constitution even to the executive government; a power of regulating, in a certain degree, the standard of the currency of the kingdom, and of varying this standard at their pleasure. A precedent has been established, by which, upon any suggestion of temporary expediency, the whole personal property and monied interests of the country may be committed to the discretion of a commercial body not responsible to the legislature, and not known to the constitution.'

This extraordinary measure, which originated in embarrassment and temporary difficulties, has been suffered to continue from mere inadvertence. Neither the public nor the legislature appear to have considered to what consequences such proceedings ultimately tend. Had parliament been called upon to authorize any of those direct frauds upon the currency which have often disgraced arbitrary governments, had it been recommended to them to raise the denomination, or to diminish the value, of the current coin, there can be no doubt that such a proposal would have been rejected with indignation. Yet an abuse of the same nature has been established by law in this country. The power of reducing the value of the currency by a silent and gradual depreciation is more dangerous from the very circumstance of its being less direct and less exposed to observation.' p. 84.

The substance of this work is well drawn up by the noble author himself; and our readers, before they examine the pamphlet, may, if they object to his system, profitably employ themselves in penning down their own arguments, and comparing them with those so ably advanced. The whole of the argument in it—

'--rests upon a few great and undeniable principles:--that the indispensable requisite and only true foundation of every just medium of exchange is intrinsic value;—that the precious metals have been selected for this purpose, as possessing this quality at all times and places in the greatest degree and with the fewest variations;—and that the establishment of a medium of exchange, either not really possessing, or not truly

representing intrinsic value, is contrary to the first principles of justice.

The advantages of a paper currency have in the course of this discussion been most fully admitted; but it has been shewn that these advantages altogether depend upon its being a just medium of exchange, that is, upon its being exactly equivalent to that quantity of the precious metals which would otherwise be employed for that purpose. In order that it may possess this value, it is necessary that a currency of this description should in all cases be immediately and unconditionally convertible into specie. The power of this conversion is the only quality which can give it any just title to be considered as the representative of value, and the only security against the abuses to which such a currency is exposed. Without such a power it is in constant danger of being depreciated by excess of quantity.

It has been stated that every depreciation of currency, by whatever means occasioned, must necessarily produce a corresponding effect upon all exchanges, and upon all prices. But as these are subject in general to great variations, the market price of bullion and the state of foreign exchanges have been selected, as furnishing in conjunction the most accurate criterion of the pure or depreciated state of a currency. If the depreciation is sufficiently considerable, it must in all cases be clearly discovered by these tests.

These general positions do not rest upon mere probability. They are consequences which must necessarily result from the nature of the subjects to which they relate; and they have all the force and effect of demonstration. The application of these principles to the particular cases which have been here considered depends altogether upon reasoning of a different nature; and, as the conclusion is drawn from a long deduction of facts, there may be room for doubt as to particular inferences. Yet there appears on the whole to be such a concurrence of circumstances as to afford us all the assurance of which a subject, not capable of positive proof, will admit.

The principal steps and final result of this part of the argument may be thus shortly stated.—Since February 1797 the currency of this country has been carried on by a medium of exchange not possessing, and not truly representing, intrinsic value, and therefore capable of being depreciated by an excess of quantity. During the greater part of that time there have been the same variations in the market price of bullion, and in the state of the exchange, which ought, according to the above reasoning, to have taken place upon the supposition of a depreciated currency. Upon a reference to the several accounts of the amount of bank notes in circulation, it is found that precisely those circumstances which our theory would lead us to expect, have in reality happened; and that there has within the same period been a great and corresponding increase in the quantity of that currency. It is a fact which tends very strongly to illustrate and confirm the truth of this reasoning, that upon comparing the state of the exchange and of bullion with the amount of bank notes, it appears that the effects have been proportioned in a most remarkable degree to the supposed cause:—that every successive addition to the notes in circulation has increased those unfavourable appearances in the exchange and price of silver from whence a depreciation was inferred; and, on the other hand,

that the occasional diminutions in the quantity of notes have had an evident tendency to restore the value of the currency by improving the exchange and depressing the high price of bullion. From these circumstances, and, above all, from the permanent effects which appear to have been produced upon the price of silver, and the state of the exchange, notwithstanding all occasional causes of fluctuation, it has been inferred, upon strong grounds of probability, that since the restriction of payments in specie in February 1797, and in consequence of that measure, the paper circulation both of Great Britain and Ireland have exceeded their proper limits, and that the currencies of both those countries have undergone a certain degree of depreciation; a fact which, with regard to the currency of the latter, is proved by evidence that is still more decisive.

‘ Though the depreciation of the English currency is not sufficient to produce an actual difference in value between gold coin and bank notes in the ordinary transactions of commerce; yet its effect, though less perceptible, is not the less real or certain; and it must have contributed together with other causes to that general increase of prices and that diminution in the value of money which has taken place within a few years. The inconveniences which have resulted from hence are universally felt and experienced. The public creditors and that numerous class of society who subsist upon limited or stipulated incomes are injured in their property; the faith of contracts is indirectly violated, and those alone escape loss who have the means of augmenting their revenue in the degree in which the value of money is reduced. Yet these evils are to a certain degree unavoidable, even in those cases where the currency remains in a state of the utmost purity. The precious metals themselves, though the best practical standards of value, are far short of perfect truth and accuracy. In process of time, and during a course of years, they are subject to great variations. From the necessary effect of additional taxes, and the greater expence of subsistence, all wages are gradually increased, and the same quantity of coin no longer represents the same portion of labour or commodities. That a great effect upon prices has been produced in this manner it is impossible to doubt. It is a fact much less certain, but by no means improbable, that a still further depreciation is imperceptibly taking place in consequence of an actual addition to the precious metals by an increased supply from the American mines. Whatever may be the true mode of accounting for this evil, the fact itself is certain, and it has been experienced in a most remarkable degree in our own time and country; yet, so long as it arose from natural and necessary causes, however it might be lamented, it was an inconvenience not admitting of any practical remedy. But the effect of the present restriction of payments in specie is to aggravate this great and unavoidable evil by direct legislative interference.’ p. 77.

We have been thus copious in our extracts, both from the great importance of the subject, and the pleasure we are convinced that our readers will feel from such proofs of solid judgement and impartiality in a noble legislator. The investigation of such a subject does him great credit: the mode of treating it proves him to be worthy of a high place among our statesmen. We cannot flatter him, however, with any other success in the discussion, than a conviction that he has proved his

point; and that, though the nation should continue in its pernicious course, he has done every thing in his power to bring it back to the principles of true policy and commercial integrity.

RELIGION.

ART. 20.—*The Duties of loving the Brotherhood, fearing God, and honouring the King, illustrated and enforced in a Sermon, preached before two Friendly Societies, by the Rev. Francis Skurray, M. A. &c. 8vo. 1s. Longman and Rees.*

These duties are enforced with great good sense and propriety. The mistaken conduct of the manufacturers is treated with just censure and affectionate reproof. Religious animosity is deprecated, and shewn to be thoroughly inconsistent with the love prescribed by the Gospels; and sentiments like the following would do honour to any pulpit:—

‘ We come into the world with different degrees of intellectual capacity; we are bred up under different systems of education; and, perhaps, have been accustomed from our youth up to join in contrary modes of public worship. These circumstances, like so many barriers, oppose uniformity of opinion, on these interesting subjects; and should call forth a spirit of mutual forbearance.’ p. 8.

‘ In order also to abate the flames of indignation, kindled by the collision of opposing prejudices, you should consider that it is possible that each party may reach the kingdom of heaven, tho’ you travel by different roads, and that each may have at heart the prosperity of his country, tho’ you differ about the means by which it may be effected.’ p. 9.

ART. 21.—*Causes of the Inefficacy of Fasts, in a Sermon preached at the Octagon-Chapel, Bath, on the Fast-Day, October the 19th, 1803. By the Rev. John Gardiner, D. D. 8vo. 1s. 6d. Hatchard.*

Five causes are here advanced for the inefficacy of fasts.

‘ 1st, That we do not consider the foundation, nor enter into the essential design of this duty—2dly, that we do not contemplate as we ought the corruption, so offensive to the divine attributes, which prevails among us—3dly, that we do not reflect with gratitude on the loving-kindness and long-suffering of God towards us—4thly, that we do not sufficiently dread his anger which must fall on all sinful nations who are impenitent—and lastly, that we do not receive instruction from those judgments of his, which manifestly have for some time been and still are in the earth.’ p. 9.

These causes are examined with equal force and judgement; and, in the conclusion, the following solemn apostrophe is addressed to the nation.

‘ O Herods, then, cease to be intoxicated with yourselves, give up your idols of vanity, your superfluous pomp and luxury—O Felixes

abandon your Drusillas.—O Elis, curb the impetuosity of your licentious sons—Belshazzars, tremble and repent, when conscience smites you in your midnight revels. Indifference to God's word, neglect of his worship, violations of his Sabbath, gaming, duelling, adultery, seduction, hypocrisy and fraud, let such abominations be no more heard of in the land—but strive to make your country distinguished as a “royal priesthood, a holy nation, a peculiar people, zealous of good works.” Then, we shall not only present to the world the magnificent spectacle of citizens armed and prepared to chastise an audacious foe for his violent and unjust pretensions; united in impenetrable bands, and resolved to relinquish their birthright privileges only with their lives—but we shall exhibit the still more affecting and edifying scene of a Christian people devoutly intent on discharging their duty to the best of fathers and benefactors, striving to reconcile to them a just and holy God whose indignation their ingratitude and other numerous sins have so grievously provoked.

‘And then we shall not fail to reap substantial benefits from our religious exercises, to experience a durable satisfaction in the efficacy of our fasts. Inspired with a true fear of God we shall be justified in abandoning all fear of a presumptuous mortal: we shall have a right to treat with consummate derision the vain boasts of the Philistine who threatens to approach our shores. Then we shall fast and the Almighty will see—we shall praise his holy name, and our praises will not ascend to his throne in vain—we shall confess to him our sins, and he will efface them with the “blood of sprinkling” on the cross—in a word, we shall address him our prayers, and he will grant us our hearts desire; he will convert our heaviness into joy, and in comforting our beloved Sion will restore to us the blessings of peace, of safety, and prosperity.’ P. 52.

ART. 22.—*A Sermon, preached on Wednesday, October, 19, 1803, on Occasion of a general Fast, at the Parish Church of Cheshunt St. Mary, County of Herts. By the Rev. W. A. Armstrong, A B. F. S. A. and published at the Request of the Parishioners. 8vo. 1s. Hatchard. 1803.*

The severity of criticism is deprecated by the writer, but he needs not dread it. His manly sentiments, at such a time, must plead too strongly in his favour, to permit us to exercise any rigour; and our readers will seldom think it necessary, after presenting them with the following animated paragraph:—

‘We do not now contend merely for freedom of opinion, but for the very existence of religion amongst us: not for the sovereignty of a few foreign acres, a barren rock, or a burning sand; but for the preservation of our native soil: not for a set of laws of doubtful wisdom dependant upon the caprice of a despot; but for a constitution flowing down to us through the blood of our forefathers, in the administration of which we have each of us an indisputable share, and which the experience of ages has proved to be more favourable to true liberty, more productive of domestic comfort and national honour, than any system of ethics hitherto devised by human policy: not merely for the little property we may each of us possess; but for every

thing the heart of man holds dear in domestic or public life, our wives, our children, and our homes, our king, our liberties, and our God.'
P. 20.

ART. 23.—*A loyal Tribute to the Virtues of our amiable and beloved Sovereign, offered in a Sermon, preached at Navestock, Essex, on a Day appointed to enrol Volunteers. By J. Filkes, Vicar. 8vo. 1s. Rivingtons. 1803.*

'One likes to praise where one needs not flatter, and justly to extol whom all are ready to approve.' So says our author; but praise is rendered more or less acceptable according to the manner in which it is administered; and to this part of the subject the author has not paid sufficient attention.

ART. 24.—*A short and practical Account of the principal Doctrines of Christianity. For the Use of young Persons. To which are added suitable Prayers. By W. J. Rees, M. A. &c. 12mo. 1s. Sael. 1803.*

This work, intended for the use of young persons before confirmation, is well calculated for the purpose.

ART. 25.—*A familiar Conversation on religious Bigotry, Candor, and Liberality; humbly intended as a Persuasive to greater Moderation, Union, and Peace, amongst the Followers of Christ. By David Eaton. 8vo. 2s. Marsom. 1803.*

The conversation is maintained between Mr. Candidus and Mr. Zelotes. Each makes terribly long-winded speeches; and the former concludes with one of not less than twelve pages and a half, which we presume had been previously delivered from the pulpit. The sentiments inculcated by Candidus are worthy of consideration; and we wish they had been compiled, agreeably indeed to the title page, more in the style of easy and familiar conversation.

ART. 26.—*The Antiquity and Advantages of Church-Music, considered in a Sermon, preached in the Cathedral Church of Worcester, on Tuesday, September 27, 1803, at the annual Meeting of the three Choirs of Worcester, Gloucester, and Hereford, for the Relief of the Widows and Orphans of the poor Clergy of the three Dioceses: by the Rev. H. A. Stillingfleet, Rector of How-Caple, &c. 8vo. 1s. Rivingtons. 1803.*

The advantages of sacred music are by no means enlarged upon in the manner we expected on reading the title-page. The influence on the mind, from the combination of pious sentiments with sacred sounds, deserved to have been insisted upon with a greater degree of energy. That the antiquity of sacred music is great, and the use of it almost universal, cannot be doubted; yet some among Christians have denied its propriety, and banished it from their religious assemblies; and in our common churches it is frequently so little cultivated that its absence would not be at all detrimental to the service.

Where, however, the organ breathes its solemn strains, and the human voice unites with it in real harmony, there the fire of devotion may certainly be fanned and maintained for a considerable time; and the advantages of such music can scarcely be doubted by those who have formed a due estimate of human nature.

ART. 27.—*The national Defence: a Sermon, preached in the Parish Churches of Wainfleet, All-Saints, and Thorpe, in the County of Lincoln, on Sunday the 7th of August, 1803, (the Day on which "Important Considerations for the People of this Kingdom," were distributed amongst the Inhabitants of the above-named Parishes.) By the Rev. Peter Bulmer, A. B. &c. 8vo. 6d. Spragg. 1803.*

A strong philippic against Bonaparte: this may, perhaps, yet have its use; but we prefer the exhortations to unanimity and zeal in defence of the country, with which the discourse abounds.

ART. 28.—*Courage and Union in a Time of national Danger.—A Sermon preached October 9, 1803, at the Unitarian Chapel, Essex Street, by the Rev. Jeremiah Joyce. Published at the Desire of several Persons who heard it. 8vo. 1s. Johnson. 1803.*

The example of Nehemiah is very aptly introduced as the subject of this discourse; and if he could say, Shall such a man as I flee? the British nation may well echo, Shall such a people as this be timid and irresolute in the hour of danger—be senseless of the privileges for which it contends, and of the high station it holds among the states of Europe?—The preacher does not enter into the political question relative to the origin of the war, but confines himself very judiciously to the state in which we actually exist at present; and urges every argument to promote patriotism, courage, and unanimity, at this awful crisis.

ART. 29.—*A Sermon, preached at Saint Andrew's Church, Plymouth, at the Visitation of the venerable Ralph Barnes, M. A. &c. May 27, 1803, by J. Bidlake, B. A. &c. Printed at the Request of the Archdeacon and Clergy, then present. 8vo. 1s. Murray.*

The request of the archdeacon and clergy confers a sanction on the publication of this discourse, to which it is justly entitled. The supposed little prevalence of Christian motives on human conduct is shown to be ill founded, the utility of the clerical character is justified, and proper means of preserving and increasing it are pointed out with equal judgement and modesty.

ART. 30.—*French Philosophy: or a short Account of the Principles and Conduct of the French Infidels. By Thomas Thompson, Esq. F. A. S. The third Edition. 12mo, 3d. Whitfield. 1803.*

Philosophers and infidels are now fair game. M. Barruel's authority is appealed to in this work, and all his extravagancies are ap

plauded. There have been bad men professing Christianity, and bad men professing philosophy; but the zeal of some persons against philosophy and philosophers savours much of the pagan and popish spirit against their adversaries.

ART. 31.—*A Sermon, preached at Worship-street, on Wednesday, Oct. 19, 1803, the Day appointed for a national Fast. To which is added, an Account of the Destruction of the Spanish Armada; being the greatest Force ever brought together for the Invasion of this Country. By John Evans, A.M. Published by Request. 8vo. 1s. Symonds. 1803.*

We are here each of us exhorted to help our neighbour by advice, by corporeal strength, and worldly property.

EDUCATION.

ART. 32.—*Progressive Exercises, adapted to the Eton Accidence; to be written or repeated whilst Boys are learning the Nouns and Verbs. To which are added, a few of the most obvious Rules, with easy Examples, to teach Boys to construe or translate from the Latin. The third Edition, improved and much enlarged. 8vo. 2s. 6d. No London Bookseller's Name.*

The young scholar, who follows this excellent and judicious plan, will, if he have in his progress been frequently questioned on the meaning of the words introduced, be qualified to enter on a lection of the most difficult authors, and may employ his time much better than in learning rules by heart—a mode, which, though strongly recommended, is the last, not the first thing to be acquired by the young student.

ART. 33.—*A new Guide to the Italian Language. By which it may be learned with great Facility and Dispatch. Chiefly intended for young Ladies, and those who have not learned their own Language grammatically. On a very simple and easy Plan, never before attempted. By G. A. Graglia. 12mo. 3s. Bound. Longman and Rees. 1803.*

This Guide, by M. Graglia, differs principally from all other books of this nature by its having nearly the whole of it employed upon the Italian verbs, while the remarks upon the remaining parts of speech are confined to a very small compass. The author very properly considers the verbs as the most important, and at the same time the most difficult, part of a language; and he has, in consequence, bestowed upon them a great deal of attention. The labour, he says, has not been thrown away; for he finds his method to have succeeded greatly among his own scholars. Experience is the best criterion of the worth of a school-book; yet we should hardly have thought it necessary to conjugate eight-and-thirty verbs throughout, in order to give to any scholar, of a tolerable capacity, a proper degree of acquaintance with this individual part of the accidence. M. Graglia says he has observed

punctually — what we would recommend to every writer of foreign school-books, and what we are sorry to say he has *not* done—we mean the placing an accent on the predominant syllable of *every* word throughout the book. Perhaps it is his printer who has defeated this his laudable design; but we beg to call his attention to the verb *persuadere* (p. 168 to 182) for one proof that it has been greatly neglected.

ART. 34.—*English Parsing, comprising the Rules of Syntax, exemplified by appropriate Lessons under each Rule: with an Index, containing all the Parts of Speech in the different Lessons unparsed. For the Use of Schools, private Teachers, and elder Students. By James Giles, Master of the Free-School, Gravesend. 12mo. 2s. Bound. Robinsons. 1803.*

Parsing is a very useful exercise: but it should be adapted to the genius of the language. It cannot be made too simple and clear; and the English tongue is happily free from a variety of rules which are found very troublesome in the acquisition of the Greek and Latin. In this work, however, we find the student is to be burdened with a pluperfect, first and second future tenses, with a potential and subjunctive moods. The instances, however, are well chosen, and the mode of parsing is, according to the writer's grammar, well explained.

ART. 35.—*Edwin, King of Northumberland. A Story of the seventh Century. By Clara Reece. 18mo. 1s. 6d. Boards. Vernor and Hood. 1802.*

This is a pretty little history of Edwin, interwoven with some fanciful descriptions of the cave of Cymroc the druid, and other superstitions of the times, which render it an interesting tale to the minds of children.

ART. 36.—*The rational Brutes; or, talking Animals. By M. Pelham. 18mo. 1s. 6d. Boards. Harris. 1803.*

The intent of the conversations held in this little volume is to inspire children with a hatred of cruelty to animals; but the brutes might have been taught to speak to much more advantage on this subject, than it has been the care of the author to make them.

POETRY.

ART. 37.—*Poems, containing Sketches of Northern Mythology, &c. By F. Sayers, M.D. The third Edition. 8vo. 4s. sewed. Cadell and Davies. 1803.*

The second edition of these classical poems we have already noticed. This re-publication is distinguished from the former by a considerable prolongation of the erudite notes (those at p. 105 and p. 112 are interesting specimens)—by a wholly new, somewhat free, and very skilful translation of the Cyclops of Euripides—by the omission of several minor poems which the author's maturer judgement has condemned—and by the insertion of some original pieces, among which the following Ode to Night is perhaps the most beautiful.

• Hither, O queen of silence, turn the steeds,
The slow-pac'd steeds which draw thy ebony car,
And heave athwart the sky
Thy starry-studded veil.

• Come not with all thy horrors clad, thy heaps
Of threat'ning pitchy clouds, thy wasteful blasts
Which howling o'er the deep,
High swell the boisterous surge.

• Far be the fearful forms which round thee float !
The owl shrill-shrieking, and the flitting bat,
And every ghastly shape
That frightened fancy spies !

• But come with peaceful step, while o'er the land,
Parch'd by the sultry sun, thy coolness breathes,
And summer mists are shed
Upon the withering herb.

• Let all be still—save the sweet note of her
Who warbles to thy steps, and the faint sound
Of yon tall trees that bend
Before thy swelling breeze.

• Or from the distant mountain, whose huge crags
Are pil'd to heaven, let Echo feebly send
The falling waters roar
Across the wide-spread lake.

• Then will I hasten to the firm-built tower,
And climb its winding steps, and from the top
Gaze with a deep delight
On heaven's bright burning fires ;

• While from the northern verge of ether shoot
The flickering tides of ever-changing light,
Now rolling yellow streams,
Now ting'd with glary red ;

• Pleas'd will I trace the meteor of the vale,
Which smoothly sliding thro' its shining path
Sinks in its swampy bed,
And dims its fires in mist :

• Descending 'midst the fields below I'll stray,
Where on the grass the quiet herds are stretch'd,
Mixing their fragrant breath
With freshen'd scents of flowers,

• Or loitering on the brim of ocean, mark
The pale beams dancing on its curled waves,
While from the gleamy east
The moon begins her course ;

• Then slowly wandering to my peaceful home ;
I'll seek my silent couch, and floating dreams
Shall feast my charmed soul
With airy scenes of bliss.' P. 220.

To this author may be applied what Dryden says of Virgil: we see the objects he presents us with in their native figures, in their proper motions; but so we see them, as our own eyes could never have beheld them equally beautiful in themselves. We see the soul of the poet, like that viewless mind of which he speaks, informing and moving through all his pictures. We behold him embellishing his images, as he makes Venus breathing beauty upon his own Pandora.

ART. 38.—*Broomholme Priory, or the Loves of Albert and Agnes. A Poem, in four Books. 4to. 7s. 6d. Boards. Hurst.*

This poem, as we learn from a rhymed preface, is the work of a lady. It is printed with elegance, adorned with a good engraving, and adapted to illustrate a Norfolk ruin, called Broomholme Priory.

The first book introduces, as the lonely resident in an old castle, the heroine Agnes, whom her father Rodolpho has betrothed to Godfrey, his friend, and now his companion in the holy wars. She is expecting their return, when an accident compels her to receive into the castle a wounded youth named Albert.

In the second book, Albert, having recovered, withdraws, not without making a deep impression on the heart of Agnes: he is the nephew of Godfrey; and the lovers indulge the hope of the uncle's resigning his claim.

In the third book, Rodolpho compels Agnes to marry Godfrey, having first persuaded her that Albert is dead. During the nuptial ceremony, Albert rushes into the church, and is wounded by his uncle dangerously. This moment supplies the finest picture in the poem.

“Rash, foolish boy!” impetuous Godfrey cries,
Whilst storms of passion darted from his eyes;
“Release her hand, or this avenging steel,
Shall in thy bosom my fierce vengeance seal.”
Forth from his side the murd’rous blade he drew
Whilst Agnes shrieking midst th’attendants flew,
Tearing with violence her flowing vest,
And bar’d the beauty of her throbbing breast;
“Oh hold thy murderous hand”—she frantic cri’d,
“Stop thy fell sword—or drink this purple tide;
Guide here thy hand, and find this constant heart,
Dig deep and make it from its cell to start;
’Twill spring with glee at Albert’s feet to fly,
Bathe them with crimson tears, and joy to die—
Let but my Albert live;—Death’s icy hand
Shall waft me smiling to a happier land.”

“Oh lovely pleader, hide thy matchless charms,
And find thy refuge in thy Albert’s arms,
Conceal thy beauty in this faithful breast,
Tell me thy woes, and sigh thy soul to rest.”

‘As Albert sorrowing o’er Agnes hung,
Hope’s soothing accents flowing from his tongue;
Godfrey enrag’d, rais’d his relentless sword,
Which kept in faith too true it’s master’s word;

O'ercome with rage he gave the death-fraught wound,
And purple streams imbru'd the hallow'd ground.

" Ah me! I sink beneath the murd'rous steel,"
The hapless Albert cried,— " no pow'r can heal—
Ah me—these rending pangs—alas I die—
Bleeding I fall—no friendly succour nigh—
Farewell my injured love—catch my last breath,
My eyes are shaded by the film of death—
But e'er my hov'ring soul forsakes this frame—
Oh hear me, peace with all the world proclaim—
This outstretch'd hand e'en Godfrey's pardon seals—
This heart no dire resentment for him feels." P. 70.

In the fourth and concluding book, Agnes dies in the agonies of grief, with symptoms of madness. Rodolpho perishes in the holy wars; and bequeaths his property for the foundation of a monastery, at Broomholme, where Albert, who again recovers, becomes a monk.

The versification is easy and harmonious, the style polished and elegant, but somewhat languid and diffuse: the sentiments have oftener tenderness than force; and indulge the display of feeling in preference to energy: the descriptive passages abound too much with detail, but they are fancifully varied, and agreeably picturesque.

NOVELS, &c.

ART. 39.—*D'Aveyro; or, the Head in the Glass Cage. A Novel. By F. L. C. Montjoye. Translated from the French. 3 Vols. 12mo. 16s. Boards. Jones. 1803.*

In following the thread of this story, we are whisked, in the space of a letter or two, from Madrid in Spain to the castle of Vincennes in France; and thence, in as short an interval, to the palace of the dey of Algiers, without receiving one atom of benefit from all this bustle of traveling. In fact, we have scarcely ever seen a performance where the author, from a barrenness of invention, has jumbled together a greater portion of absurdity and nonsense.

MISCELLANEOUS LIST.

ART. 40.—*Life of Buonaparte, in which the atrocious Deeds, which he has perpetrated, in order to attain his elevated Station, are faithfully recorded; by which Means every Briton will be enabled to judge of the Disposition of his threatening Foe; and have the faint Idea of the Desolation which awaits this Country, should his Menaces ever be realized. By Lieut. Sarratt, of the Royal York Mary-le-bone Volunteers. 12mo. 3s. 6d. Boards. Tegg and Castleman.*

A tale of horror. The English do not require such statements, whether true or false, to rouse their courage. Their effect, moreover, is much weakened by the continual obtrusion of the author's own comments upon each transaction.

APPENDIX

TO

THE THIRTY-NINTH VOLUME

OF THE

NEW ARRANGEMENT

OF THE

CRITICAL REVIEW.

ART. I.—*Oupnek'-hat* (*id est, Secretum tegendum*); *Opus in ipsa India rarissimum, &c.*

Oupnek'-hat (*that is, The Secret to be concealed*); a Work peculiarly rare in India: containing the ancient and secret, or theologic and philosophic Doctrine, taken from the four sacred Books of the Indians, *Rak Beid, Dgedjer Beid, Sam Beid, and Athrbau Beid*; translated into Latin from the Persian Text, intermixed with Sanscreeet Words, illustrated with Dissertations and Notes, explaining the more difficult Passages. By *Anquetil du Perron, Indian Traveller, &c.* Vol. I. 4to. Strasburg and Paris.

THOUGH father Paolino, of St. Bartholomew, whose description of India, and particularly of the Malabar coast, we some time since noticed with respect, treated the existence of the beids or vedas as fabulous, yet authors of the highest credit have regarded them as real works of considerable antiquity. Professor White published some fragments of them, in 1783, at the end of *Political and Military Institutes*, attributed to Tamerlane; and Mr. Halhed introduced another fragment, in his preface on the *Code of the Laws of the Gentus*. Whether, however, the four vedas still exist entire in the original language, is yet uncertain. It is pretended that a copy is to be found in the national library at Paris; but we apprehend it consists, in part, of extracts: the Sanscreeet, the great root of all the Eastern dialects, which boasts of an antiquity equal to that of the Hebrew, is yet imperfectly known; and no portion of the vedas, supposed even to approach the æra of Moses, have appeared without the suspicion of our having seen them through the medium of a Persian translation, and consequently without the imputation of numerous errors and interpolations. There are, we believe, two Persian versions now in England. Of these, one belongs to Mr. Boughton

Rouse, formerly governor of Bengal, from which Dr. White translated the fragment that he published; and which version is asserted, by the present translator, to be highly inaccurate.

The volume before us contains an advertisement, and a preliminary dissertation, consisting of 135 pages. The dissertation is followed by the preface of the Persian translator, and by 300 pages of the work itself, with short notes. In these 300 pages we find only six sections of the fifty comprised in the Persian: when the rest will follow, we know not; but the extent of the whole must be immense. The age of the author, the fatigue resulting from his former travels, and his present labours, will probably permit him to give little more than he has now presented to us, even if he be not cut off, like Lavoisier, by the stroke of the guillotine; for he is a decided enemy to the revolution, and has the imprudence to show it on every occasion, by indirect allusions. After the Oupnek'-hat, we find other notes, dissertations, and corrections, which extend the work to 400 pages. This part contains numerous inductions from the text respecting the æra of the work, which is here fixed at 2000 years before the Christian epoch. Our author shows its antiquity to be very considerable, even if we should not, with him, extend it to a period very near that of the deluge.

The chief feature of the doctrine here inculcated, indeed the leading principle of the religion of the East, is the existence of a God, the creator of all things. This point M. Anquetil du Perron labours, with peculiar anxiety, to establish, by quotations from Strabo, Plutarch, Palladius, St. Ambrose, the Mahabharat, the Ayen Abkari, &c. The Mahabharat, which means the great history, is said, by father Paolino, to be a collection of sixteen ancient epic poems, consisting of more than 100,000 stanzas, containing all the information respecting the ancient history, the mythology, and the religion of India. The Bhagavat-Ghita comprises one only of the episodes. The ancient, constant, and steady belief of a God, in India, is indeed incontestable; and of this deity, Brahma, Vishnou, and Swa, are the agents, or rather, perhaps, the divine attributes personified:—'Precious dogmas,' adds our author, 'which the course of ages, successive nations, and the revolutions of the universe, have not been able to obliterate from the minds of mankind!' Among the passages adduced from the Mahabharat is a singular one, in which we find three persons in the divine essence; two of which proceed from 'God holy and almighty,' viz. the great and first intellect, Mahanat, and the heart, or will, Ahankar.

M. du Perron preferred the Latin, as it admitted of inversions, like the Persian, the Arabic, and the Hebrew. Maracci employed it with success in translating the Koran; and the Latin of the Vulgate comes very near the Hebrew. His translation is literal; and the work will be concluded by a Sanscreeet

grammar and dictionary, from a manuscript in the national library, in Roman characters, with a French translation. We have already received a grammar of this language in Sanscreeet characters, by father Paolino, published in 1790, at Rome, 4to; and an incomplete vocabulary of the same, relative to religion, *De Cælo*, published at Rome also, in 1798.

The preliminary dissertation contains a comparison of the religion and philosophy of the Oupnek'-hat with those of the most celebrated rabbis, some ancient doctors of the Catholic church, as well as some modern writers. They agree in the belief of a Supreme Being, his nature and attributes; the origin of the world by emanation or creation; the existence of an intellectual world long anterior to the present; the influence of the stars on the earth and on terrestrial bodies. Each of these positions is separately examined and supported; but, with respect to the last, the worthy author leans towards the idle fancies of Swedenborg, Mesmer, and the magnetic physicians. The position is sufficiently supported by the influence of the sun on the planetary motions, of the planets on the satellites, and of the sun and moon on the tides, &c. The conclusion is, that the Indian dogmas, under the name of the oriental doctrine, passed from the Indians to the Persians; thence in succession to the Greeks and Romans; and, through the northern nations, to us.

The Persian translation is the work of prince Mohammed Darah Shakoh, eldest brother of Aurengzebe, murdered by that usurper in 1657. As the preface is not long, we shall translate it.

‘ In the year of the Hegira 1050, and that of Christ 1640, Mohammed Darah Shakoh, traveling through the beautiful country of Cashmire, found there Molashah, the most learned of the Islamites: he at that time began to collect the mystical books, to be instructed in the doctrine of an union with God, which is obscure in the Koran, and almost unknown. He procured the divine books, the law of Moses, the Psalms of David, and the Gospel. Finding yet nothing sufficiently clear, he applied to the Indians—a very ancient sect, who spoke much of the union with God. Among this cast, above all the divine books, were the four vedas, sent from heaven to the prophets, containing the true doctrine of becoming one with God. The Oupnek'-hat, extracted from these four books, contains what is most excellent in them. There are also some commentaries by prophets of that period.

‘ This prince, animated with zeal for the truth, having sought to discover the doctrine of the union with God, by means of the Arabic, Syriac, Persian, and Sanscreeet, resolved to translate into the Persian the Oupnek'-hat, a real treasure of this kind, and communicate it to the Islamites. In the year of

the Hegira 1067, of the Christian era 1656-7, he brought from Benares, the residence of the learned of that cast, to Delhi, the pundits and saniassis well acquainted with the Vedas and the Oupnek'-hat, and induced them to translate, verbally, into Persian, this ancient and excellent book, which is the foundation of the Koran. Whosoever will read and understand this book, with purity and simplicity of heart, as a translation of the word of God, shall enjoy everlasting felicity.'

The six sections of the Oupnek'-hat, of which this work consists, are divided into eighty-six instructions, reduced to eighty-three, by rejecting the preface, a table of the Sanscreeet words employed, and a table of the titles of the fifty sections, with that of the four vedas, from which each section is extracted. These instructions contain detached passages, in the form of little histories and dialogues: they illustrate or announce some point of the Indian philosophy or morality. We shall add a general view of the whole doctrine.

' God is all that exists, and which appears to exist; all that knows, and that is known; all that is soul or spirit, and all that appears corporeal. God alone is all; agent and patient, object and subject, cause and effect.

' God is the being Light. *By certain habits of the soul and body* we arrive at the knowledge of him, and are enabled to see him here below. *Thus we become one with God,* we become light, we become God. In this happy state we are at rest: the world is nothing to us. We do not think; we cannot sin. Good works are of no service, bad ones do no harm.

' This world is a phantom only: it is the illusion of dreams during sleep; it is a series of the accidents, of the modification of our spirits: it is God, so far as he is in our souls, as he acts on them, on himself, in giving them, in giving himself, sensations and ideas not real: it is the slight of hand of a juggler.'

Such is the language constantly repeated; and whatever fancy, under the guise of philosophy---superstition or fanaticism, in the garb of religion, have suggested, in later ages, dangerous to the well-being of mankind, to active virtue, and to social intercourse, may be drawn from this source. These notions are so mixed with traits of history and mythology; with pictures of Indian manners; with physiologic and metaphysical ideas, sometimes accurate, but more often trifling and fanciful; with abstractions, assuming occasionally the appearance of reality; with mystic, allegoric, and cabalistic fancies, that we can with difficulty comprehend them; and they appear, on examination, to be rêveries, or solemn trifles, alone: yet, among this varied group, among these unfruitful sands, we find sometimes fertile spots; we can trace the sublimest principles of religion and morality, wholly unconnected with the fancies with which they are united. May

not these be original opinions, probably revelations, disguised and disfigured by human fictions?

After a careful examination of this work, we see numerous circumstances that lead us to suppose it a partial extract from the vedas, with various interpolations. The prince seems to have been a zealous illuminate, anxious for a union with the divine essence; in which the pundits were, probably, by no means unwilling to gratify him. This part of the subject, which we shall again notice, is full of the most trifling fancies, the most superstitious rêveries. We shall, however, make some extracts from the more prominent features of the work; and, to render them more generally intelligible, shall present them in an English dress. The first relates to God.

‘It is the Creator! His mysterious name is Oum, and it must be pronounced three times. Having learnt this word, constantly meditate on it, for it is emphatically THE WORD*. On this account, in the first veda, it is pronounced in a high melodious tone, called, in Persian, *adkitch* or *kerat*.

‘The Adkitch is all that is most excellent. He who knows him, and makes him the subject of his meditation, shall obtain every good for himself and others. The word *oum* supposes that we have made an inclination of the body; for, if we wish to approve of any person, we say *oum*. To bend the body thus is a great happiness. This word comprehends the three vedas. We speak not of the fourth, for its source is the three others. It came after, it arose from them. We thus call God *atma*, that is, emphatically, the soul. He is called also the universal soul; the soul of souls, the soul of every thing; *pram-atma*, the first soul, emphatically the agent (*karta*); *antrdjams* (the only being in every thing); *anandsroup* (joy without end); *maia* (illusion), on account of the material world, which is the figure of God, that appears to exist, and does not exist. He is the form of light, the form of truth, of science, of joy.

‘He fills all; he is in all, and beyond all; he is the ancient; he is male and female; he has made every thing; he has not been created; he is immortal; he has no interior or exterior senses; he is pure; he is subtile—the most subtile of all beings; he is the universal and only being without duality. * * * *

‘There are four parts, or four quarters, of the science of God. To know the east, the west, the north, and the south, is to know a quarter of this science. He who knows this quarter has gained a great victory over the worlds†. To be ac-

* We have given this passage an emphasis (not strongly marked in the translation) for obvious reasons; and we think it well founded.

† The meaning of this phrase alludes to an Indian dogma, that the soul, after being separated from the body, passes through different worlds, to expiate the sins ‘done in the days of nature,’ in other words, for the purpose of purification.

quainted with the earth, the atmosphere, the heavens, and the sea, is to know the second quarter. He who knows it, is infinite, and has gained the victory over the worlds. To know the fire, the sun, the moon, and the thunder, is to know the third quarter of this science. He who knows it, becomes luminous, and gains a great victory over the worlds. To be acquainted with respiration, sight, hearing, and the heart, is to be acquainted with the fourth quarter. He who is acquainted with it, is at rest; he has gained the victory over the worlds.'

The following prayer is professedly taken from the veda;—we translate only the introduction.

'Thou art Brahma! thou art Vishnou! thou art Koudra*! thou art Pradjapat†! thou art the fire! thou art Deionta‡! thou art air! thou art Andr§! thou art the moon! thou art the food! thou art Djam||! thou art the earth! thou art the world! thou art the æther! thou art exempt from error! thou makest the works of the veda and of the world! thou art the law and the world! O Lord of the world! to thee humble submission! O soul of the world! thou who makest the actions of the world, who destroyest the world, who tastest the pleasures of the world! O life of the world! the internal and external world are the sport of thy power! Thou art the master, universal soul! To thee humble submission! O thou, of all secret things the most secret! O thou, more elevated than our perceptions and our thoughts, thou hast neither beginning nor end! To thee humble submission!

'The universal soul possesses all time—it is present every where; but, as it is the sight of sights, the hearing of hearings, the thought of thoughts, the science of sciences, it can neither be seen, comprehended, learned, as it is the principle and root of all.'

This is noble and truly sublime; but how inferior to the simple energetic prayer taught by our Saviour: 'Our Father, who art in heaven,' &c. The account of the creation is also infinitely inferior to the simply dignified and sublime narrative of Moses.

'The whole world is the Creator, comes from the Creator, subsists in him, and returns to him. Before the creation, the Creator was silent, meditating on himself: he pronounced the

* The names of the three powers of God, considered as creator, preserver, and destroyer.

† A collection of gross elements.

‡ A collective name of good genii or angels.

§ The king, the chief, the guardian of the good genii; the Indra, or the Jupiter of the Indians.

|| The king, the guardian, the chief of the souls of the dead.

word Oum, the name of God, in which the three worlds exist. Before all, was the perfect Being without name; alone without a similitude, without vice or fault.

' Ignorant people say, that the world, in the beginning, did not exist in its author, that it was made of nothing. O you whose hearts are pure, how could something arise from nothing? This first Being, alone and without a similitude, was all in the beginning: he would multiply himself under different forms; he made fire come from his essence, which is light, and this fire would multiply itself under different forms; he made water come from himself—and hence, in man, the perspiration arises from heat—and he multiplied the water under different forms. The earth next appeared, and all that grows upon the earth—all that has life, as well as eggs and seeds.

' This Being without an equal, light of light, has produced, from his own substance, fire, water, and earth, and has willed that all bodies shall be composed of these three elements. He placed in the bodies souls, which existed anterior to the bodies, and which are a portion of the universal soul *djion-atma*. Bodies take their names from one of these three elements, which ever predominates. These three elements are but one. In flame, the red is fire; the white, water; the black, earth. It is the same in the sun, in the moon, in the thunder.'

We cannot proceed in this detail, which becomes truly gross and uninteresting: we trace, however, in this mass of absurdity, the union of the subtile elements; the chaos; the creation of the *Word*, which is the form of the three vedas, because the first Being wished to have a second body, sensible and material; and the naming all creatures by this first Being. Pressed by hunger, he attempted to swallow the sun, who cried out, Bhan! and the *Word was manifested*. This will be a sufficient specimen of the rest.

What relates to the angels and the world, is not very interesting: from the latter, however, we shall select a short passage.

' Besides this visible world, there is a primitive world, which is the world of the Creator. Besides this world, there is a world of ancestors, and the world of the good genii, Besides the terrestrial world, there is the world of the atmosphere, and the world of Paradise. In Paradise are two rivers and the tree of life.'

The chapter on man is, on the whole, interesting; but it is too long to transcribe. The great doctrine inculcated is, that man consists of soul and body. The soul is an emanation from the universal soul, and a part of it—a portion of the being Light; to which, when separated from the body, it returns: yet we see traces of a future state, in which good actions are re-

warded and bad ones punished, and of the country from which the sun withdraws its light for six months. The metempsychosis forms only a subordinate, probably an interpolated, part of the system. Man is considered as a free agent; but works of mercy are said to be always performed with the assistance of God.

The design and object of this collection, we have said, is the 'unification with God;' and the subtle pundits have probably collected from the vedas every thing on this subject, for the gratification of their young proselyte. Whence the disciples of de Mainaduc, and others, may have drawn their tenets, we cannot say; but we perceive evident traces of resemblance in the work before us.

'The universal soul penetrates all things. Whoso knows this, and makes it the subject of his meditations, his prayer shall never be in vain. Every thing is easy to him who is acquainted with God.

'The soul of man was once the universal soul. When it recollects this, and meditates on it, it becomes God. This cannot, however, happen but in an elevated cast *.' * * * *

'When the heart has renounced desires and actions, it ascends to its principle, which is the universal soul. When it ascends to its principle, it has no will but that of the true Being.' * * * *

'Brahma, the agent of the creation, taught the doctrine of the unification to his eldest son Athrba. It is the greatest of sciences; it comprehends all. Athrba taught it to Ankra; he to Satbeck, descended from the Bhardouadj; and he to Ankras. It is the science which the great masters teach to the less; it is the chief science. Grammar, logic, &c. &c. are only the inferior sciences—those necessary to man in society with man. The chief science teaches the means of arriving at God.'

Much of this jargon was rehearsed by the modern magnetisers; but, having shown the importance of this science, the way of attaining it is next taught. After numerous ceremonies and prayers, the directions are the following.

'Six means of arriving at the only Being, and of being one with him.—1, to hold your breath; 2, to abstract strongly your senses from external objects to yourself; 3, to meditate on some grand object; 4, to attach your mind strongly to it; 5, to acquire the true science; 6, to be absorbed in it. The conjunction of these means the Djog, or the unification.'

* We perceive, however, in some parts of this collection, that, if you fulfil the works of any cast, you are of that cast: if your works be pure, your cast is pure.

We shall not enlarge farther on the work ; and, perhaps, our account may already have appeared too extensive. The pretensions of the vedas to an epoch so remote ; the probability, that, by this guide, we might ascend to some of the first fountains of divine revelation, coëval, perhaps the same, with those of Moses ; have induced us to examine the work with great attention. We shall add our opinion in very few words. The present compilation is suspicious : it was collected with a particular view, and is seemingly a partial account of the doctrines of the Bramins. It is not for us to say, whether the vedas still exist. Such works once existed ; and, if they now remain, we fear they are in a state far removed from their original purity. The present religion of Hindustan by no means reaches to a very remote antiquity ; and we have not so high an opinion of the modern Bramins, as to suppose them incapable of altering what would not suit the present system. Whatever we receive from them, must be examined with a scrupulous and a jealous eye. Yet, even in the work before us, we meet with many marks of pure morality and of true religion, debased with numerous fancies and superstitions ; we see much of what the Pythagoreans have hinted at, Plato taught, and the earlier fathers of the church have collected as the foundation of their speculations. In short, we see evident marks of an early antiquity ; but we see too many decisive proofs of interpolation and additions, to rest secure on any one point.

We should now conclude our article, but that the notes and dissertations, longer and more interesting than the work itself, will claim some share, at least, of our attention. Independently of their utility in elucidating the original, they discuss and illustrate various points of literature and history, of philosophy and politics.

M. A. du Perron is particularly anxious to promote the study of the Latin, in which he writes, and very severely reprehends modern authors, for having neglected it so much. Whatever works have any connexion, even most remotely, with the oriental doctrines, particularly those of the present collection, are noticed, and their various merits discriminated with learning and spirit, but, perhaps, not with great impartiality. It is, at least, certain, that he steps often beyond his limits, and enlarges on authors who have never seen the *Oupnek'-hat*, and on works that have scarcely any connexion with his subject.

To illustrate the doctrines of the ancient philosophers, is, undoubtedly, an object of considerable importance ; and on this point our author often gives us some very satisfactory information, filling up many of the lacunæ, which even the accurate and indefatigable Brucker had left untouched. His dissertation

on the opinion of Pagan authors, and the principal doctors of the Christian church, concerning the means of reconciling destiny and the doctrine of predestination with the liberty of man, is a very masterly one, and merits particular attention. We could on no occasion engage in so abstruse an inquiry; much less would it be proper in this place.

One of the most interesting questions of history, is, undoubtedly, the antiquity of the world. On this point we have taken a decided part, and are well pleased with the support of M. du Perron. His reflexions and inquiries respecting the zodiac of Dendera, and the arguments adduced from it, merit great attention. We are pleased to find, that de Lalande, in a late journal, has endeavoured to refute the arguments drawn from this source. M. de Lue, in the *Bibliothèque Britannique*, has added his observations: but the most satisfactory disquisition, we are informed, has proceeded from M. le Coz, archbishop of Besançon, in a work entitled, *A Defence of Christian Religion*, published in 8vo. at Paris. The learned antiquary, Visconti, has also engaged to exert his talents on the same side.

M. du Perron seems to approve the idea, that the creation of the world is an emanation of the substance of God, and supports it with some limitations. The same opinion is, we find, defended, with great ability, by M. Isnard, in his work on the immortality of the soul, printed in 1802, at Paris. The philosophy of Kant is opposed with great zeal by our author, who shows, that it, in some respects, resembles the doctrines of the Bramins, as explained in the *Oupnek'-hat*. A memoir was read on this subject to the Institute, in the course of the last year, in which Kant's system was warmly opposed. The author was M. Destutt-Tracy*.

We have mentioned, that M. du Perron was an enemy to the revolution. We shall copy a striking picture of the conduct of the Greek and Roman republics, but of which the prototype was evidently at home. We shall give the original, as a specimen of the author's latinity. We have endeavoured to render it in almost corresponding words,

‘*Moralem illam haud saperent magni illi (vere pusilli)—rectores, duces, victores; qui ut unum terræ pollicem adquirant, vel stultas cupiditates satient, sanguinis flumina effundere, orbemque totum commovere, subvertere non dubitant.*

‘*Sed quorsum hæc? Jus, rectum, probitatem, etiam ejus externam faciem, susque deque faciunt. Quicquid appetunt, justum, quicquid improbant, malum, vi extorta munerum nomine decorant: soli sui defensorem, rebellem pronuntiant, debellant, trucidant: pacta conventa exuunt; commissas arces pro utilitate*

* See *Memoirs of the National Institute* in our present Appendix, p. 518.

destruunt; regiones expugnatas exspoliant, tributis oppriment; dignitatibus et epulis referti servum et esurientem populum felicem proclamant. Pax! pax! clamitant, et atroci bello indesinenter student.

‘Quid mirum! Fortuna, vel hostis imbecillitas, dubia erga amicos et foederatos fides, quædam eis dedit commoda: et aleatorum more, hesternum successum hodierni sponsionem reputant*.’

Language can furnish nothing more striking, more energetic, more indignant, and more just.

The author is a violent enemy of the Jesuits; and thinks, that a society of free-masons, ‘in the name of liberty and equality,’ has attempted to succeed them; and that, imitating the conduct of their predecessors, they are very apprehensive of their re-establishment.

It is not by conquest, he remarks, which only prepares for new wars, but by agriculture, commerce, and industry, that governments should enrich nations; by which they would greatly enlarge their own revenues. This may afford some inducement, when the rage of conquest is at an end.

M. du Perron was always an advocate for Indian commerce, and now again returns to the subject. He contends, that the East-India trade had destroyed, in a whole century, fewer soldiers than fell in the Egyptian expedition; and that the adventures of this company were of the greatest importance to France. He laments the bad success of the Egyptian army, and shows how they might have escaped from the capitulation which they had signed. On the whole, these notes contain a variety of subjects not connected with the Oupnek'-hat, and are truly interesting and valuable.

* ‘Such great men (truly babies) would not relish this morality; the rulers, generals, conquerors, we mean; who, to attain an inch of territory, or satisfy their besotted lusts, do not hesitate to shed rivers of blood; to shake, to subvert the world.

‘But to what purpose such declamation? Justice, rectitude, probity, even their most slender resemblances, they turn topsy-turvy. Whatever they covet, is, with them, equitable; whatever they dislike, iniquitous: whatever they extort by force, they varnish with the name of free gifts. The defender of his country they style a rebel: they assault, they murder him. Treaties, conventions, they violate: citadels committed to their protection they demolish: the territories of the vanquished they plunder, they crush with contributions: and, gorged with banquetings and dignities, they call the enslaved and starving people, happy. Peace! peace! they vociferate, and incessantly prepare for outrageous war.

‘Why should we wonder! Fortune, the weakness of the enemy, or their own unsteady faith towards their friends and allies, have obtained for them some advantages; and, like gamblers, they stake the success of to-day on that of yesterday.’

The author thinks it necessary to add, ‘Such are, and ever will be, the principles and conduct of the Greek and Roman republics.’

ART. II.—*Mémoires sur l'Égypte, publiés dans les Années 7, 8, et 9.*
Tome troisième.

Memoirs on Egypt, published in the Years 7, 8, and 9, &c.
Vol. III. 8vo. Paris, 1802.

THE theme of Egypt is yet unexhausted; and, as it may be again the scene of contest, every thing relating to it must be interesting, even were it not already an object of importance by the events of other times, by its having formed an early retreat for the children of Israel, and been the country in which so many miracles were displayed—the country in which the most heroic actions have been achieved—in which both art and riches have been exhausted to add to its decorations.

This third volume is not, perhaps, so valuable as the former, yet it contains much information of importance. The first article is the commission of instructions from general Kleber to those members of the Institute who were directed to inquire into the modern state of Egypt. The instructions display great sagacity, extensive views, and sound judgement. We have reason, however, to believe, that these objects were not carefully pursued.

The ‘Memoir on the Agriculture and Commerce of Upper Egypt, by M. Gerard, chief Engineer of Bridges and Highways,’ is a very extensive paper. The object of his mission was to examine the means of augmenting the influence of the Nile on the fertility of Egypt, and to collect materials for establishing, on a general plan, the hydraulic system of this country. Previous to his explanation of the means of restoring fertility to Egypt, our author describes ‘the physical Constitution of Upper Egypt.’ This consists of a concise and perspicuous account of the topography of the district, from which we shall transcribe a short passage, the whole that may be styled new.

‘We found, by three experiments, one made between Cairo and Benysouef, and the two others at Syouth, at the time when the river was lowest, that its mean *expense* was 782 cubic metres in a second. If we admit, according to the opinion of Guglielminé, that the velocities are proportional to the square roots of the heights, this expense amounts to 6580 cubic metres, about nine times greater, when the Nile flows in a full stream, during the inundation.’

The 2d section is ‘On the Government of Upper Egypt in later Times, and the moral Causes of the Decay of Agriculture.’—In this inquiry our author shows, that the Nile is still a fertilising river, and that the powers of mankind are not less, than at the period of the utmost fecundity of the soil. Yet something is diminished by the increased height of the bed of the

river from the deposition of the mud, and, consequently, the canals are not equally useful, as the former level is destroyed. That Egypt may, however, be still fertile, is shown from a part having been so, in the middle of the last century, in consequence of a tribe of Arabs, from Tunis, having settled on the river, between Syouth and Kenneh. This tribe was expelled by the beys, not many years ago. The peculiar government of the beys, and the distractions of this ill-fated country within the two last centuries, have, however, greatly lessened its general cultivation.

The 3d section is 'On the present State of Agriculture and its Products.'—This view of Egyptian Agriculture is full, clear, and satisfactory. We cannot abridge it, as we must, in such case, be compelled to describe all the vegetable riches of the country; nor can we select any part of peculiar importance. Indigo, colso, trefoil, tobacco, and fœnugree, are the most lucrative objects of cultivation. The ground requires only watering; and the different methods of watering, when the Nile does not rise to the necessary height, are explained. The animals used in husbandry are oxen: the horse is an object of expense and luxury, from its utility in war.

The 4th section is 'On the right of Property, and the Assessment of Taxes, in Egypt.'—It contains some curious details on this subject, which we cannot abridge; but the minuter history of the Copts, and their connexion with the beys, as the collectors, is of more general importance.

The 5th section is 'On the present State of Industry and Commerce in Egypt.'—It contains a very satisfactory account of the manufactures of Egypt, which are chiefly carried on by the Coptic and Catholic Christians. What, however, appears more interesting still, is the description of the Indian trade from Kenneh to Cosseir, through the Red Sea. A short and comprehensive view of this commerce, from the earliest ages, is a very valuable part of the article.

The memoir which follows, is 'On the Fabrication of Bread in Egypt.'—This is not a subject at present to detain us; but much information respecting the manufacture of bread in general may be drawn from it. The wheat of Lower Egypt seems greatly superior to that of the upper region; and the latter, by being ripened quickly, is of a horny nature, and cannot be properly ground without wetting it. From the carelessness of the farmers, the grain, particularly of Lower Egypt, is mixed with the seeds of different plants, some of which are seemingly injurious; and the waste from these, and the earth mixed with the corn, has, in some instances, amounted to 40 in 100.

'A Memoir on the Remains of the City of Eleithias, in the Thebaid, and on the Processes of Agriculture and some other

peculiarly necessary Arts among the ancient Egyptians. By M. Costaz.—This memoir has strongly engaged our attention. On the Arabic side of the Nile, at about 4-10ths of the distance between Edfou and Esneh, on the course of the river, are the remains of an ancient city, called by the inhabitants El Kobe, which d'Anville thinks was the ancient Lucina, more generally known by the Greek appellation *Ελεῖθια*; each, in its respective language, was the name of the goddess who presided over child-birth. The idea of d'Anville is confirmed by the modern term Eleitz.

M. Costaz contends, in opposition to Herodotus and Horus, on the authority of Manetho, quoted by Plutarch and Porphyry, that human victims were sacrificed at Eleithias (Eilethias). The victims were the Tithonians, or those who had red hair, a circumstance connected too closely with the primary history of Egypt to be explained in this place. Though ancient and modern authors have warmly contested this point of human sacrifices, yet it is too fully established, by the representations on the walls of the great temple at Philæ, at Thebes, &c. In more than one of these, the appearance of the priest, as the sacrificer, or assistant, shows the connexion of these horrid rites with the religion of Egypt. Eilethias is, however, a more important spot, as the grottoes in the neighbouring mountains, particularly two of them, are adorned with paintings of the most useful arts, and appear of the highest antiquity. They represent all the operations of husbandry, collecting lintseed, the vintage, fishing, 'fowling with nets,' the interior of a merchant's shop, the manœuvres of the navigator, embalming, and funeral ceremonies.

The instruments of husbandry are only the hoe and the plough. The hoe was often found on the ancient obelisks; and the strange fancy of Kircher, who thought it the representation of the Ibis, is properly exposed. Its use, when connected with the plough and other instruments of husbandry, is sufficiently obvious. The plough has no wheels, and resembles the French plough. The sower is carefully represented; and the seed which he scatters is sufficiently discriminated to be pronounced barley. There is no representation of a harrow; and no trace of the custom mentioned by Herodotus, of driving hogs into the fields to tread down the seed with their feet, or to bury it by their nuzzling. This last practice, however, was only customary in the country below Memphis. There are no machines for raising water; so that the canals at that time probably answered their purpose more effectually than at present, the bed of the river being now elevated above them. Their sickles had a very short handle; and they cut off only the ear. At the bottom of the field, a man is represented cooling water, in the porous jugs now employed, and with a fan, for the use of

the reapers. The corn was carried home by men, in baskets; and separated from the ear by the feet of bullocks, which were constantly kept in motion on the area where it was placed, while a man, with a broom, restrained the corn from being scattered at the sides. The corn was winnowed by being thrown into the air from hollow gourds; and there is the representation of a tablet, and of a man inclining in the present manner of writing.

The cultivation of lintseed was not very different from the manner now usually practised. The representation of the vintage is a little confused by time; but the intention is sufficiently obvious. Workmen fill the baskets with blue spherical fruits, like grapes, which are taken from a tree, supported by treillis, like vines. The grapes, apparently, were not fermented previously to the expression of the juice, which was effected by treading on them. The jars are carried on the palm of the hand, raised by elevating the fore-arm, while the hand was bent backwards towards the shoulder.

The Egyptian fishermen used seines like ours; and seem to have preserved their fishes, for they are split, cleaned, and placed out, apparently to dry. Their 'bird-catching with nets' greatly resemble our decoys. The birds represented as caught, appear to be wild-geese, which are quartered and put into pots, seemingly to be preserved with salt. The shop offers nothing particular. Animals were usually sold by weight; and one appears in the scale. The weights, as at present in Egypt, are annular. The Egyptian barks had a chamber in the middle, like the modern djerme; the sails were square, attached to yards: the rudder differed from that at present employed; but the construction is not very intelligible. Not a single bark with different ranks of oars, was discoverable. The pictures, representing funeral ceremonies, our author thinks, can scarcely be explained without a knowledge of the religious institutions, hitherto carefully concealed. A copy of the painting has, however, been taken.

The human figures are in a proportion of 24 or 25 centimetres. Nothing can be more crude than the colouring; for shades and half tints were apparently unknown. The colours are, the blood-red, an ochre-yellow, green, blue, white, and black. The carnations of the men, the animals, and the tools, are red; of the women, of the wheat, and the lintseed, yellow: the stalk of the flax, the lotus, and the vine, have a green tint; the water and the grapes are blue; the clothes white: the hair of the men is black, woolly, but *not short*. Men now usually shave their heads; but where this is not practised, the hair resembles that in the paintings. A piece of white cloth, round the waist, is the only covering of the men: the women have a tunic fixed below the breasts, reaching to the bottom of the leg: they are not veiled.

'Observations on the Date-Tree and its Cultivation. By M. Reynier.'—The date is not properly a tree, but resembles more the herbaceous plants; for its trunk is formed of hard flexible fibres, that extend through its whole length. In the middle is a kind of marrow, which, in one species, furnishes the sago. It has no bark; but the surface is covered with cicatrices, left by the leaves after their fall, and hardened by the air. When divided lengthwise, the planks, formed of the trunk, become moderately hard. The dry medullary powder near the summit, changes to a fleshy mass, of an herbaceous nature, which forms the terminal bud. This mass is about a foot long, of a diameter nearly equal to that of the trunk. It is, on the top, medullary, but it becomes fibrous and woody near the bottom. The first rudiments of the leaves sprout from the top of this part of the plant. It is said to produce a leaf every month. The production does not, however, appear to be so regular, though there are about twelve in a year.

Our author pursues the description; but, having given the outline, it is not necessary to follow him. He proceeds to the cultivation of the date-palm, its caprification, its harvest, its varieties, and its productions. Every part of the date-palm is useful; and the annual profit of each tree is estimated from three to five francs. At this value, the forest of Saleh-hyéh is worth, to its owners, more than two millions of francs.

'Method of Caprification employed on the Sycamore Fig-Tree. By L. Reynier.'—The term caprification is too indiscriminate: in the date-palm, it means the method of introducing the pollen of the male flowers more certainly to the female; in the common fig, the advantage is derived by the puncture of insects brought from the flowers of the wild fig; and, in the sycamore fig, it arises from cutting off the male flowers at the eye, when, either by the irritation of the wound, or by the fruit enjoying the superabundant nourishment which the male flowers would otherwise have received, the maturity is considerably accelerated, and an additional crop gained. The caprification of the common fig certainly occasions a greater quantity of figs; but the fruit, though more numerous, is not equal, in size or in flavor, to that obtained without its assistance.

'Mémorial on the Administration of Egypt at the Period of the Arrival of the French. By M. Tallien.'—This memoir, which relates to the finances, is only interesting to the conquerors (the robbers) of Egypt.

'Note relating to the Appendices of the Raia and Squali, extracted from a Memoir on the Sexual Organs. By M. Geoffroy.'—The appendices are cartilaginous bodies, placed on the internal side of each ventral fin. Linnæus supposed these to be the male organs; an opinion which Bloek, on an apparently

good foundation, rejected. Our author, from some comparative dissections of lizards, particularly the ouaran of the desert, supports the opinion of Linnæus.

‘A Mineralogic Description of the Valley of Cosseir. By M. Roziere.’—This journey, through the vale trodden so many years by those who brought the riches and luxuries of India to Europe, is truly interesting. Many have, before our author, passed through this same valley; but they were not enlightened by science: it was, to them, only the path to opulence. The opening between the mountains is at the ancient city of Coptos, seven leagues above the ruins of Thebes: it is narrow, among little hills of calcareous stone, but it soon expands into a sandy desert, consisting of quartz and calcareous particles. Pits are dug to retain the water, for the service of travelers; but it is slightly salt, and has a fetid smell, probably from decaying vegetables, since wells dug near the reservoirs afford a more pleasing beverage. There are different routes through the Desert to Cosseir; and in some of those there are the remains of caravanseras, and the reservoir of water is in the middle of the building. This circumstance renders the ancient accounts of the situation of the ports on the Red Sea, uncertain, and perhaps erroneous. Our author promises to notice it in another memoir.

After passing Guitta, the mountains on each side approach to each other, so as, in some places, to form narrow defiles. Their aspect is brown and gloomy: they consist chiefly of grit, though Bruce calls them volcanic, and says, that the sphinxes, which form the avenues of the principal monuments of Thebes, are basaltic. M. Roziere, on the contrary, contends, that the monuments and the mountains are of grit exclusively. Soon afterwards breccia and quartz pudding-stones are discoverable: the *sombre* hue of the mountains is enlivened by different colours; and, near Cosseir, calcareous mountains again occur, with numerous marine remains. Some granite, with a very fine grain, was perceptible among the mountains; but pieces of granite, rounded, were frequently cemented by the paste of the pudding-stones. Some acacias, viz. the mimosa Nilotica, which produces the gum Arabic, were found in the sinuous bendings of the rocks; but vegetation of every other kind seems to have been very rare. Some of the rocks were tinged of a beautiful green, by a mineral seemingly new, but not yet chemically examined. It is probably a variety of thallite. Many minuter mineralogic remarks we must omit, as they would render our article too extensive.

At $2\frac{1}{2}$ leagues from Cosseir, are the springs of Lambageh, the water of which is accounted unwholesome, and seems to owe this quality to the stratum of gypsum through which it flows. There are here some marks of vegetation, though languid;

and here birds and gazelles are also found. On the north-west of these springs, are high granite mountains, whose bases are surrounded by schistus. The granite is of a grey, mixed with rose-colour. Its particles are of a moderate size; the greater part of a transparent quartz, the rest of feldspar; sometimes white, occasionally of a rose colour, while brilliant laminæ of black mica are diffused through the whole, with some uniformity. Our author corrects the observations of Bruce, adopted also by Brown, that, in these deserts, the Egyptians sought the materials for their most immense and gigantic structures; and that even the valley itself was laid open by the vast operations for those purposes. In fact, the stone of which the more important monuments and remains consist, is to be found near the Nile; and from this valley they only brought some fossils, of peculiar rarity, for the smaller works, such as alabaster, porphyry, Egyptian breccia, different sorts of steatites or lapis ollaris, called, improperly, the Egyptian basalt.

The description of Cosseir is nearly the same with that which Denon has given, who was of this party; and the account of the Ababdes (a tribe of Arabs, who conduct the caravans) is not so particularly new, or interesting, as to detain us. They do not greatly resemble the other Arabs, and their features approach nearer to those of Europeans. Their complexion is dark, and hair long.

‘An Account of Cosseir and its Environs. By M. Dubois, Engineer.’—We receive, in this memoir, much incidental information which we did not expect from the title. There are, we find, several routes through the valley, from the Nile to Cosseir; but the road is the same so far as Guitta, which is the first station. Where the roads divide, a cube of masonry is placed, the ancient terminus. The account of the roads does not differ essentially from the description in the last article. The passage of Strabo, supposed to be representative of the route from Coptos to Berenice, gives us, in reality, that from Coptos to Myos Hormos, about nine myriametres to the north of Cosseir. It seems as if the road to Myos Hormos (the Port of the Mouse) turned from the former route at a little distance short of Cosseir, since the journey was much longer than that to the latter port, though the real distance is not greater, if computed from Coptos.

Cosseir is described nearly as in Denon’s travels; but, instead of bringing water from Arabia, which he represents as the common practice, we find that a stream, which furnishes it in perfection, is at about a day and half’s journey from Cosseir. We ought, however, to recollect that the distance to the Nile is but little more than double. The environs of Cosseir are almost a desert, a few plants of the colocynth being its only production. The soil is sandy; but clay is at no great depth below the sur-

face. The wind, from the middle of May to the beginning of August, 1799, was always north and north-east; and about fifty boats entered the harbour. The highest tide was seventy-three centimetres: it is commonly about five decimetres; while at Suez it is about two metres. The sea is full of fishes; and, on this coast, Ptolemy, Strabo, and Pausanias, have placed the Ichthyophagi. The author describes the Ababdes very particularly; and they are, seemingly, not Arabs. We suspect them to be an Abyssinian race, though, in customs, they resemble the Scythians. Their dances represent their combats; and they bury their dead by raising heaps of stones over them.—Their songs are akin to the warlike songs of the Scandinavians; and the same man is both a poet and musician. Their mode of travel is on the dromedary, a small light kind of camel, from which the French borrowed their idea of a dromedary corps.

‘Report of the Geographic Position of the Pyramids of Memphis; the Direction of the most northern, with Respect to the Meridian, and its vertical Height. By M. Nouet.’—The longitude of the most northern pyramid is $28^{\circ} 51' 17''$; its latitude, $59^{\circ} 59' 49''$. It has been conceived that the faces of the pyramids are directed to the cardinal points; and Chazelle was supposed to have ascertained this by measurement, at the end of the seventeenth century. On a very minute and unexceptionable inquiry, however, it appeared that the face declined from the north $20'$, or one-third of a degree. Tycho Brahe's meridian line declined $18'$; and, after a careful inquiry, the present deviation was admitted to be owing to the imperfect manner in which the meridian lines were drawn at the period of the construction of these stupendous masses. The height of the truncated pyramid was found to be 421 feet 10 inches, nearly; of the whole pyramid, 440 feet 11.6 inches; its length 699 feet 9.7 inches; the diagonal of the base, 989 feet 8 inches; the inclination of the faces to the plane, $51^{\circ} 33' 44''$.

‘Observation on an Occultation of Venus by the Moon, at Cairo, 2 Frimaire, An. 8. By M. Nouet.’—By these observations the difference between the meridians of Cairo and Paris was $1^{\text{h}} 55' 53''$. The longitude of Cairo appeared to be $1^{\text{h}} 35' 52''$; of Rosetta, $1^{\text{h}} 52' 32''$; and of Alexandria, $1^{\text{h}} 50' 20''$. The latitude of Rosetta was $31^{\circ} 25'$.

‘On the Caravan of Darfour. By P. S. G.’—We find no great novelty in this short paper. The caravan brings ivory, the horns of the rhinoceros, ostrich feathers, gum, tamarinds, alum, soda, and slaves. Two caravans travel annually, each consisting of from 4000 to 5000 camels, and 200 or 300 persons. The length of their journey to Syouth is forty-five days.

‘Extract of a Memoir on the Marine. By M. Le Roy.’—A common declamation on the utility of the marine, in order to promote a commission, charged with inquiries advantageous

to it. The whole is full of vague *verbiage* and error. To suppose the Egyptians to have ever been a maritime power, is one of the greatest of blunders. Their settlement at Colchis, which is, however, established on doubtful evidence, is the only proof of their having ventured far on the sea.

‘Description of the Sena collected in Egypt. By M. Delisle.’—The true sena is the *cassia acutifolia*. It is mixed with the obtuse-leaved kind, and adulterated with the leaves of the arghel (*cynanctium argel*), which resemble those of the sena in form. The Arabian sena is from the *cassia lanceolata* of Forskal.

‘A Critical Note on the *Ximenia Ægyptiaca*. By M. Delisle.’—A description of the plant supposed to be that which affords the *myroblani chebali*.

‘A Memoir on the Irrigations, Agriculture, and Commerce, of the Province of Fayoum. By M. Girard.’—The province of Fayoum is the *Arsinoëtic nome*. It extends from east to west, nearly in right angles to the course of the Nile; and forms a fertile valley in the interior of the desert, of a radius of about seven leagues. It was once regularly overflowed by the river, and is still plentifully watered by means of canals. The country is highly fertile in every production which grows in Egypt, and still produces the vines from which wine, as in former ages, is manufactured. Roses are cultivated, for the distillation of rose-water, which is exported in large quantities. The whole of this article is valuable, but not very generally interesting, and too miscellaneous for analysis.

‘Note on the City of Tentah, and the Parties which divide the Inhabitants of Lower Egypt. By M. Girard.’—The interior of the Delta is little known, on account of the danger which usually attended excursions to this part of Egypt, from the wretched policy of the Mamelukes. Tentah is celebrated for the burial of a saint, Seyd Ahmed el-Bedaouy, who died there, in his way to Mecca. A numerous tribe of pilgrims annually visit his tomb; and these visits are rendered subservient to commerce. Thus the productions of Egypt, Abyssinia, and Darfour, are annually exchanged. There are two parties in this district, styled Sa’d and Hharam, whose mutual animosity often breaks out into hostilities, the source of which is unknown; and even the meaning of the names, like our whig and tory, is scarcely understood.

‘Topographic Description of the Valley of the Wandering; geologic Conjectures on its successive States, and the Formation of the Isthmus of Suez. By M. Girard.’—This valley, between the Nile somewhat above Cairo, and the Red Sea near to Suez, is probably so called from the passage of the Israelites. It is, in every part, filled with marks of having been once at the bottom of the sea. The isthmus of Suez was formed, our

author thinks, from its having been the meeting of two vast tides from the Mediterranean and Red Sea, occasioned by the approach of some planet. This, however, is hypothetic. The whole of this part of Egypt was once covered by the sea; and the meeting of the opposite currents, from the north and south, explains the appearances more satisfactorily than the transitory action of tides.

‘Medical Note on the Said. Communicated by M. Rouyeres.’—The Said is a district peculiarly healthy; and the ophthalmia is very uncommon: those who are blind, have lost their eyes by the small-pox. The Barbarans (probably the Berbers), a neighbouring hardy race, are also healthy; but, when they visit Cairo, suffer more severely than others from its diseases.

‘Note on the Population of Cairo.’—This city is supposed to contain about 300,000 inhabitants, without reckoning the citadel of old Cairo and Boulech. The age of some individuals exceeds one hundred; and one man died at one hundred and thirty-one years.

ART. III.—*Mémoires de l'Institut National des Sciences et des Arts.*

Memoirs of the National Institute of Sciences and Arts. (Continued from Vol. XXXVIII. p. 526.)

IN our progressive survey of this periodic and voluminous work, we now advance to vol. IV. published by the class of Literature and Polite Arts, which, in conformity with its accustomed practice, opens with an abridged history of its labours. This history resolves itself into five parts, and contains—1st, A notice of memoirs presented to the class, which are either unedited, or have been published in a separate form by the secretary, M. Villar; 2dly, Two historic notices on the life and works of Antony Leblanc, and Charles Albert Demoustier, members of the Institute, both by M. Collin-Harleville; 3dly, The annual list of prize questions; 4thly, The names of the artists who, in the judgement of the Institute, have obtained the prizes for painting, sculpture, and architecture, in the year 7; 5thly, A catalogue of books and manuscripts presented to the class.—Upon none of these divisions have we time to enlarge; nor, in our perusal of them, have we met with any thing of peculiar prominence, or that needs to detain us. The classical memoirs are, for the most part, devoted to the fruitful subject of Oriental history—a subject, however, which is daily losing its importance in France, but with respect to which its writers still show that they cannot avoid casting “one longing, lingering look behind.”—In a memoir relative to the fine arts, we perceive,

that an endeavour has been made to improve upon the effect of the panorama: its invention, however, is justly ascribed to our own countryman, Mr. Robert Parker, of Edinburgh: it was introduced into France by Mr. Fulton, an American; and the perfection it is said to have obtained, is derived from the genius of Mr. James, an American also, who has been supported in his pursuit by MM. Fontaine, Prevot, and Bourgeois. The books and pamphlets presented, are, as usual, of little value collectively—the greater part of them mere rubbish.—We proceed to the memoirs in their order.

‘I. On the Dresses of the Persians under the Dynasty of the Achæmenidæ, and that of the Successors of Alexander. By M. Mongez.’—Many of our best painters have occasionally exercised their talents on subjects drawn from Persian annals—such as the history of queen Esther, and especially that of Darius conquered by Alexander; but the greater part of them have neither known, nor been able to consult, the few monuments which relate to Persian dresses. It is the intention of M. Mongez to give them, by means of this memoir, the assistance they seem to require, that the truth of *costume* may no longer be so grossly violated, as it is well known to have been in several instances. His memoir is long, but highly instructive and entertaining: it extends, indeed, to not less than a hundred quarto pages. He has consulted, with indefatigable research, the best Grecian writers upon the subject: but his principal obligations are still due to Barnabé Brisson, who had the misfortune to flourish in the troublesome times of *The League*, and published, during the siege of Paris in 1590, a work, divided into three books, entitled, “*De regia Persarum Apparatu*,” a few months only before he fell a sacrifice to the violence of the opposite faction, who were alike incapable of corrupting or intimidating him. The work does great credit to the industry and learning of Brisson, considering the period at which he wrote; but the last two centuries have unquestionably put us into possession of monuments of high consequence and value, to which no European could at that time gain access. Brisson could not possibly make mention of the bas-relievos of Tchêkel-Minar, or of Nakschi-Rustam. He appears to have known little or nothing of the medals of the Persian kings; and does not discriminate between the Persians and the Parthi, Farsi, or Guebres, whose descendants, addicted to the solar worship of their ancestors, still inhabit the borders of the Persian gulf, and the peninsula below the Ganges. In this respect, the labours of M. Mongez are possessed of considerably more value than those of his predecessor. He commences, in the progress of his inquiries, with offering such written authorities as he has been able to collect; and then fortifies them by an explanation of monuments of every kind, which have any

connexion with the subject discussed. His memoir is divided into three sections: in the first he treats of the civil dress of the Persians under the royal race of the Achæmenidæ; in the second, of the military dress under the same family; and, in the third, of the dress of those monarchs themselves, and of Alexander the Great. The paper concludes with three illustrative tables of engravings, from Chardin, Niebhur, Pellerin, and the national cabinet.

‘II. Memoir on the Question, Can the National Library remain surrounded by the Theatre of Arts, the Buildings connected with the Treasury, the Houses which adjoin this Edifice, without being exposed to imminent Danger of Fire? By M. Peyre.’—The national library is already become a collection of no small value; and the frequent return of fires in Paris, has induced the government to inquire into the best means of preventing its destruction by so terrible a calamity. Yet it does not appear to us, that its situation exposes it to any great risk. The opera-house has, indeed, twice suffered from that misfortune since the commencement of the year 1763; but the theatre of arts, of which the opera forms only a part, is a detached building, and at a considerable distance from the library. It is exposed to much greater peril from its directly adjoining the common buildings of the treasury, as well as several houses in the streets Vivienne and De la Loi, and, more especially, from its own vicious construction. M. Peyre’s plan does not appear to us either very explicit or very simple. It principally consists in separating the parts where the greatest danger is apprehended, from the rest, by partition walls of stone or other incombustible materials—in sheathing the pilasters most exposed, with sheets of iron—in a due distribution of reservoirs, and their free communication with each other, throughout every part of the edifice. To the plan are added three plates, which are designed more fully to explain the author’s intention.

‘III. Dissertation on the Paper-money of the Orientals. By M. L. Langlés.’—That the civilisation of mankind began and proceeded from the East, there is no doubt: but many speculative historians of the present day, not content with allowing such general merit to that renowned part of the world, have wearied themselves with endeavours to trace to the same quarter every discovery which has dignified modern Europe, and have hypothetically fancied, that the latter has immediately derived it from the former. M. Langlés is well known to the public, as editor of Thunberg’s Travels, in the notes subjoined to which, he attributed the invention of gun-powder, printing, and the mariner’s compass, to some one of the nations of the East, or, at least, maintained, that these important arts have been known immemorially in India, China, Thibet, and Turkey, and were successively imported into Europe in the course of

one and the same century. In the memoir before us, he pursues this fanciful suggestion still farther; and perceiving, from an article of Mr. Wilkins, in vol. I. of the Asiatic Researches, that a royal Indian grant of land, engraved on a copper-plate, had, at least in one instance, taken place anterior to the Christian æra, and that, from the writings of father Amiot, and especially of Marco Paolo the Venetian, the Chinese were in possession of a sort of bark or paper money as early as the middle of the thirteenth century, he intimates, that the origin of paper-money in Europe may probably have proceeded from that source. Upon this point, however, he does but *intimate*; for, although it be a fact that such sort of substitute was in use about the period specified, and even throughout the Mogul empire during the prodigal reign of Kai-Khato-Khan, yet it is well known, that the invention by no means succeeded, and was relinquished within a few years from its commencement. M. Langles has given, indeed, an entertaining extract (and has hereby much increased the value of his dissertation) from the Hhabib-ûs-seir of the historian Mirk-houd, which affords a full detail of the origin and suppression of this *جاو* (*ba-ou*) or vicarious money, with the commotions which it excited through the Mogul empire. The original is here copied in the Niski character, and is succeeded by an easy version. Surely, however, we need not travel so far as to China or Hindustan, for the origin of a discovery so obvious and useful in commercial transactions as paper acknowledgements, promissory notes, and bills of exchange.

‘IV. Second Memoir on the Dresses of the Persians. By M. Mongez.’—Our indefatigable memoirist here pursues his inquiries with all the zeal of the most pertinacious antiquary; and having, in his former article, ascertained the Persian dresses in use under the royal dynasty of the Achæmenidæ, or the successors of Cyrus, the nephew of Cyaxares, down to Darius, who was assassinated by Bessus after the victory of Alexander, as also those of Alexander himself, and his own successors, whose authority was equally brief and feeble, he now descends to those of the Parthians or Arsacidæ—so denominated from Arsaces, the founder of their realm, who completely triumphed over the dynasty of the Greeks, about the middle of the third century before the Christian æra. The Arsacidæ may well be regarded as the only power whom the Romans could never subdue, and who, in reality, survived the decline of the Roman empire. They were subdued, however, at last by Artaxerxes, or, as he is called by the orientals, Ardeschir, grandson of Sassannus; who, in three pitched battles, triumphed over Ardevan, or Artabanus IV. the last prince of the line, and hereby introduced another dynasty, that of the Sassanidæ, whose

family once more conciliated the friendship of the Persians, and continued in possession of the supreme power, till the defeat of Isdegerde III. by the caliph Aly, in the middle of the seventh century: after which period, that extensive and beautiful country was successively, and sometimes simultaneously, governed by different Arab, Tartar, and Mogul princes, till the dynasty of the Shahs, or Sophis, who, in 1501, reunited the whole under one monarchy. M. Mongez does not pursue this eventful people through the entire scope of their history; but, having closed his researches into their dress, and in some degree their manners, under the Arsacidæ, he examines them, as to the same points, under their direct successors, the Sassanidæ. Like the first *mémoire*, the present is also divided into three sections, treating progressively of the civil, the military, and the royal habiliments. His former industry, and unwearied researches, are here equally conspicuous: and his ideas are confirmed and illustrated by three additional tables of engravings.

‘IV. Epistle to Vien. By M. Ducis.’—M. Vien is a celebrated painter of the present day; and the poetic epistle here addressed to him, is eulogistic of his merits. It contains nothing peculiarly worthy of translation, or even of copying.

‘V. Memoir concerning the Relations which existed in the Twelfth Century between France and Denmark; designed to serve as an Introduction to a detailed History of the Marriage of Philippe-Auguste with Ingelburge, and of their Divorce. By M. la Porte du Thiel.’—The marriage of Philippe-Auguste, who became a widower in 1191, was contracted with Ingelburge, sister of Canute VI. king of Denmark, in 1193. And although the transaction itself, with the domestic calamities that followed, are often referred to as mere historic facts; yet it is not generally known, for what reason Philip, on this occasion, was induced to seek an alliance with Denmark; and, especially, to connect, by marriage, his own country with one which, at first view, appears at that time to have possessed so few points of affinity of any kind;—what was the cause of that invincible antipathy which, all on a sudden, influenced this monarch to desert a young princess, who is uniformly represented as entitled to his utmost affection;—what motives of ambition, what reasons of state, contributed alternately to enliven and infrigidate the ardour both of the defenders and oppressors of a queen thus cruelly persecuted. To explain these diplomatic mysteries, is the object of the very bulky paper before us: and it must be confessed that M. la Porte has manifested, in the progress of his paper, much laborious research into recondite and original histories, and has brought to light many anecdotes which had hitherto been lying dormant, and given to them the semblance of positive and appro-

priate facts. The present memoir, however, is but the mere portico of a larger building—the prologue to a drama, which is hereafter to be brought forward: it is, moreover, a scion of the old academy; and we have by no means perused it with the less reverence or attention on this account. ‘It is now published,’ says the author, in a brief advertisement, ‘the same as it has been composed ever since the year 1789, and the same as it was, for the first time, read, in 1796, in the special sittings of the academy of Belles-Lettres. I have at once made it a resolution and a pleasure to myself not to retrench a single sentence: I neither disavow, nor wish to dissemble, the sentiments which, at that epoch, dictated what may perhaps appear remarkable in the beginning of the second part. Confident of never having possessed at any time, positive that I never can conceive during the remainder of my life, a single thought which does not appertain to the purest love of virtue and my country, on every occasion, in all circumstances, I have allowed, and I will always most willingly allow, my readers to penetrate the very bottom of my heart.’

‘VI. Appendix to the preceding Memoir; or Dissertation on the State of the Church at Messina, in the Catholic Hierarchy, down to the Thirteenth Century.’—Forty quarto pages, added to the antecedent introduction of not less than one hundred and twenty-two pages, to give a conjectural emendation of a single word in a passage which M. La Porte thought it requisite to refer to in the writings of Etienne de Tournay!! *Ampullam tyriacâ*, says the latter, *probatissimâ plenam, ab archiepisco MAMERTINO, Antiocheni patriarchæ suffraganeo, concanonico, et amico nostro, mihi datam.* The last editor of the Letters of Etienne has justified this reading, and explained the phrase archiepisco Mamertino, ‘archbishop of Messina.’ Our memoirist, however, although he admits that Messina was occasionally denominated by the ancients *Mamertum*, or *Mamertinorum civitas*, yet contends that no Latin author posterior to Cicero has thus denominated it: he shows the impossibility that an archbishop of Messina could be a suffragan of the patriarch of Antioch; and proposes, that, for *Mamertino*, should be read *Malmistrano*, or *Mamistrensi*; the church of *Mopsuestia*, or, as it was otherwise called, *Mamistra* or *Malmistra*, in the second Cilicia, having been subject to the patriarchal church of Antioch. This church, it is true, adds our author, was for a long time nothing more than a simple bishopric; but it appears that it was erected into an archbishopric in 1162. The conjecture is ingenious, but equally verbose and misplaced.

‘VII. The Despair of Achilles after the Death of Patroclus: A Fragment from Book XVIII. of the Iliad, translated into French Verse. By M. Villar.’—The first one hundred and forty-six lines of the Greek are rendered into *two hundred and twelve*

of M. Villar's native tongue. Our readers may judge of the merit of this wire-drawn interpretation from the following passage, with which the fragment concludes.

*'Les nymphes, à sa voix, par des chemins divers,
Se replongent ensemble au vaste sein des mers;
Et, confirmant son vol, à l'ardeur qui l'anime,
De l'Olympe déjà Thétis atteint la cime.'*

The original of this nervous, sententious version is comprised in the following couplet.

——— αἱ δ' ὑπο κυμα θαλασσης αυτικ' εδυσαν.
'Ηδ' αυτ' Ουλυμπονδε θεα θετις αργυροπεζα
Hien—

in which the reader will perceive that not a syllable of the translation is to be traced which is marked in Italics, while the appropriate and almost exclusive epithet of *αργυροπεζα* 'silver-footed,' as applied to Thetis, is, to make amends for the redundancy, totally omitted.

'VIII. Report made to the Class of Literature and Polite Arts, and to the Class of Mathematical and Physical Sciences of the National Institute, Frimaire 3 and 6, Year 8 (1800). By M. Camus: in the Name of the Commission composed by MM. Chaptal, Darcet, Duhamel, Vincent, and Camus.'—M. Boudier presented to the Institute a variety of impressions from an engraved plate, produced by a process which he conceived might be most advantageously applied to the form of commercial bills, pass-ports, or any other object concerning which it is of consequence to guard against counterfeits. The report in question is the result of a committee appointed to examine into the merits of the discovery; who speak highly of the ingenuity of the artist, but can by no means warrant that his process will altogether answer the purpose to which it pretends, and render it impossible either for the public or the autographist to discriminate between a counterfeit and a true copy: they consequently cannot conscientiously recommend it to the Institute in its present state, but strenuously advise the inventor to persevere in his plan, till it have acquired, if possible, the degree of perfection of which he himself imagines it to be susceptible. The plate employed in the instance before us, is glass, instead of copper; and it is engraved and tinted by means of different mordants, of which the fluoric acid is a principal. Justice, in our opinion, appears scarcely to be rendered to the scientific toil and indefatigable industry of M. Boudier; who, although unquestionably not the inventor of the art of engraving on glass, appears to have carried it to a higher point of perfection, by means of a variety of corrosives, appropriate to the different

substances of which glass consists, than any former speculatist whatever. Subjoined to the report is an appendix, or historic note, on the antiquity of the process of engraving on glass, by means of a fluid, and on the persons who have engaged in the practice. This notice commences with the discovery of Schwanhard, as communicated in the Nuremberg History of Arts, and which is supposed to have died with him. It pursues its inquiries to the present day, through Wigand, Puymaurin, Guyton-de-Morveau, Klaproth, and Fourcroy; and does ample justice to our own countryman, Mr. Accum, and professor Wilson of Glasgow.

‘IX. Project for a National Library to be erected on the Site of La Magdelaine, in Ville-l’Eveque. By M. Peyre.’—M. Peyre, having pointed out in a former memoir, inserted in the volume before us, many of the dangers to which the national library is exposed in its present situation, here proposes both a new situation and a new plan. We object not to either, but cannot convey to our readers any adequate idea of his design without the accompanying plates. As the national museum of natural history, that of painting, and that of sculpture, have been so considerably improved and embellished within the period of the last six years, we see no reason why the attention of government ought not to be, in some measure, bestowed upon meliorating the present very defective state of the national library—unless indeed the public funds be unequal to the undertaking, in consequence of the existing delirium in favour of an invasion of this country.

‘X. Reflexions on Pindar, followed by a Translation of his first Olympic Ode. By M. Bitaubé.’—These reflexions are intended to point out the high character entertained of the poetry of this unrivaled Grecian lyrist, by the best critics of antiquity; his peculiar style and beauties; and to free him from the charges of obscurity and too frequent digression. The observations, however, are unpardonably trite and hackneyed; nor have we met with a single passage worth translating. The specimen here offered of our author’s poetic talents possesses the same kind of mediocrity. The ode, of which he has attempted a version, is rendered into *prose*. The first Olympic of Pindar, in French prose, is an advertisement so inauspicious, that we are convinced our readers have no desire whatever to walk in and partake of the entertainment.

‘XI. The Olive, the Fig-tree, the Vine, and the Bramble: a Fable of Joatham; copied from the Bible, Judges ix. 8. By M. Andrieux.’—We have simplicity enough to prefer the plain prose of the bible to the laboured verse of the writer before us; the *parable* of Joatham to the *fable* of M. Andrieux.

‘XII. Socrates and Glauco: a Dialogue, from the Memorabilia of Xenophon, B. iii. 8. By the same.’—A story, which,

like the foregoing, has, in our opinion, gained nothing from its present appearance in French metre.

‘XII. Dialogue between two Journalists, on the terms *Monsieur* and *Citoyen*. By the same.’—Another effort of M. Andrieux’s muse, to prop the declining and short-lived honours of *citoyen*, or *citizen*—an upstart, who appears, even at the present moment, and in the French metropolis itself, to be in great danger of strangulation, from the recovered vigour and perpetual attacks of *monsieur*. The poet calls, in the first place, etymology to the assistance of the young *conscript*; and endeavours to prove, partly by verse and more fully still by subjoined notes, first, that *sire*, *sieur*, *monsieur*, are all derived from the Greek *κύριος*, *lord* or *master*, and, hence, are terms of base servitude and degradation; while, secondly, that *citoyen*, *citizen*, or *civis*, deduces its nobler lineage from *coïre*, to assemble together on terms of equality or for some common purpose, and is therefore an expression of much higher dignity than the former, and may be employed without any servility whatever.

‘*Sire, sieur, et monsieur, selon de vieux auteurs,
En étymologie habiles inventeurs,
Vient du Grec κύριος : il veut dire, mon maître.
Oh ! combien je préfère un nom, dont la magie
Double notre valeur, soutient notre énergie—
Le nom de citoyen ! Il retrace à la fois,
A celui qui l’entend, ses devoirs et ses droits.
Ce nom, à remonter jusqu’à son origine,
Offre plus de douceurs qu’on ne se l’imagine :
Nos graves érudits l’ont toujours fait venir
Du Latin coïre, s’assembler et s’unir.*’

By the confession of the poet himself, however, notwithstanding all the grammar and logic in favour of his friend *citoyen*, *monsieur*, as we have already observed, is once more likely to obtain a decided victory among his countrymen; and he admits, in a note, that, while the former term is employed in public assemblies, tribunals, books, and journals, the latter is still so rooted in the very habit and constitution of a Frenchman, that it may yet be allowed in the case of familiar conversation; his dialogue, in consequence, thus concludes :

————— ‘je hais la servitude,
Mais je sais compatir à la vieille habitude :
De la déraciner s’il n’est point de moyens,
Appelez-vous *messieurs*, mais soyez *citoyens*.’

‘XIV. Melpomene and Thalia, an allegoric Poem in two Cantos. By M. Collin-Harleville.’—These cantos describe the grand tour of the tragic and comic muses round the different

nations of Europe, from the time of their commencing their travels in Greece to the present moment. The poem is written with ease and elegance, and has just the same pretension to a place in the labours of the National Institute, as those by which it is preceded, namely, that they have nothing better to offer. The English *Tragedians* selected to be immortalised by M. Harleville, are, Shakspeare, Otway, and Addison: and the appended notes begin with the following information: 'Tragedy has its source in the Iliad of Homer: it is also contended that his Odyssey was the cradle of comedy:—but what is there not to be traced in Homer?'—What, indeed!

'XV. Memoir on the ancient Statue denominated the Borghese Gladiator. By M. Esprit-Antoine Gebelin, Associate.'—The celebrated and exquisitely beautiful figure here referred to, was examined, at some length, and with no small portion of solid and antiquarian erudition, by M. Mongez, in a paper in vol. II. of the present class of the National Institute, and was noticed by ourselves in the Appendix to our thirty-fourth volume, p. 522. On the discovery of this statue in the ruins of Antium, the first idea that struck the connoisseurs who flocked to behold it, was, that it represented a gladiator; and the sculptor who undertook to restore the right hand, which was wanting, in conformity with such idea, actually placed the hilt of a sword in the hand he thus added. The first antiquary who objected to this common belief that the statue was that of a gladiator, was Winkelmann; and, instead of a gladiator, he denominated him a herald. The object of M. Mongez was, to prove that the statue represents neither a gladiator nor a herald, but a Grecian hero or gymnast; and M. Gebelin, altogether acceding to the opinion of M. Mongez, endeavours to render it probable, that, of the various classes of gymnasts, the statue represents a *σφαριστής*, a kind of ball or tennis player. He proves, from the attitudes exhibited in a game of a similar kind, as at present practised in many parts of Italy, that the character of the Borghese statue better comports with this, than with any other class of gymnastic candidates; that the *sphærista* was in high credit in ancient times; and that statues were by no means infrequently erected to him, when successful.

'XVI. The Pharsalia, Book I.: a free and abridged version. By M. Gouvé.'—M. Gouvé will make an acceptable present to his countrymen, by pursuing his subject, and translating the entire poem, with the same spirit which pervades the specimen before us.

'XVII. Dialogue on Comedy. By M. Collin-Harleville.'—The dialogue is maintained between a young poet and a recluse. The latter offers a variety of valuable observations to the former, upon the error of applying his talents to subjects of every kind: he finds him best qualified for comedy, and advises

him to study Moliere, and adhere to this branch of poetry alone.

‘ La comédie !—eh-mais ! c’est un beau champ ! Nul être
N’a tous les dons : heureux d’en tenir un du ciel !
Un ver donne la soie, et l’abeille le miel.’

‘ Nor mean the comic impulse ; nor has heaven
To every mortal every talent given :
Thrice happy he with one alone bedeck’d !
So worms spin silk, and honey bees collect.’

With this colloquy the volume concludes ; and we now proceed to the class of Moral and Political Sciences, the fourth volume of whose labours we have accompanied as far as its fourth memoir inclusively.

‘ V. First Memoir on the Constitution of the Republic of Athens. By M. Charles Peter Levesque.’

‘ VI. Second Memoir on the same. By the same.’

‘ VII. Third Memoir on the same. By the same.’—In periodic works, like our own Journal, which is of monthly, or the memoirs before us, which are of annual return, it is occasionally found necessary, in order to introduce a greater variety to the choice of the reader, to break the study or consideration of subjects that require much attention and voluminous remarks, into a series of articles, to be furnished at distinct intervals. We know of no other reason for the division of the present disquisition into three separate papers ; nor do we know of any other reason, after such separation, for their simultaneous appearance, than the dearth of other subjects, and the dire necessity of filling up a volume with whatever may happen to be at hand. We mean, however, no disparagement to the abilities of M. Levesque, whose researches into the constitution of the Spartan republic we have already had an opportunity of noticing with approbation, and whose classical knowledge has proved a useful resource on the present occasion. Yet we cannot avoid repeating, that, had every subject discussed been extended to as disproportionate a space as the present, the entire volume of the memoirs, bulky as it is, would have admitted but of four articles.

In the first of the papers before us, M. Levesque treats of the people, the archons, the council of five-hundred, the Areopagus, and the assembly of the people, which form so many distinct sections in the course of his political narrative. In the second he considers the promulgation and abrogation of the Athenian laws. His third is confined exclusively to the subject of the tribunes, respecting whose award he totally differs from de Pauw, who professed the greatest veneration for it as a

popular assembly, asserting that the safety of the accused increases in proportion as we multiply the number of their judges. 'I am far from thinking in this manner,' observes M. Levesque: 'an entire people, like the Athenians, who were often judges in capital causes, must necessarily be subject to the most enormous decisions. The multitude are credulous: they lend an ear to whatever is rumoured against the suspected, and on the most idle reports condemn him beforehand. They are easily exacerbated; and, upon the simple assertion of the accusers, they become personal enemies of the accused. They confound public rumours with public notoriety; and, as they themselves are at once both the authors and organs of such rumours, these, in their own eyes, assume the character of truth. They possess that malignity, unhappily too natural to mankind, which stimulates them to believe evil rather than good; whence they are more easily influenced by the demagogue than by the defender. They are suspicious and fearful, and readily prejudge a citizen who is presented to them as their enemy. They are little capable of following arguments, but are quickly fascinated by eloquence: it is hence no difficult matter for an orator to render himself master of their decisions. Every popular assembly of the Athenians, whose history has descended to us, was unjust: unjustly was Miltiades condemned; unjustly was Aristides banished by the ostracism; unjustly were the generals punished with death, who had rendered their countrymen victorious over the Locrians; unjustly, in the social war, was an exorbitant fine imposed on Timotheus, a venerable old man, an able commander, whom Fortune never forsook in his engagements, and who had added seventy-five towns to the republic: in fine, unjustly did Phocion perish, the last citizen who served the community faithfully with his hand and with his counsels.' We cannot follow M. Levesque through the detail of his arrangement: his memoir evinces literature and judgement, and the passage we have selected is a fair specimen of its general style.

'VIII. Memoir on the Return of the Argonauts by the North. By the same.'—We have lately had occasion to examine this subject with some attention, in our review of Mr. Preston's version of the Argonautics of Apollonius Rhodius: we there observed that Apollonius differed, in some measure, in his account of the track pursued by Jason, from his predecessor in the same story, Orpheus: we also asserted our belief that the poem was founded on some prior fact which had descended through many successive ages in the form of a popular legend, but considerably augmented and varied in its relation by different and successive writers. M. Levesque, in the memoir before us, entertains ideas altogether similar; but prefers the prior account of the Argonautic navigation, as given by

Orpheus, to that communicated by Apollonius, as it is, in some measure, supported by the testimony of Diodorus Siculus; and conceives that the earlier Greeks were better acquainted with the geography of high northern latitudes than those of later æras. 'I believe,' says he, 'after the fictitious Orpheus, and those Greek historians (referred to by Diodorus Siculus), that, if we cannot prove, we may strongly presume, that the Greeks, in the most ancient periods, possessed juster ideas of these northern countries than they possessed afterwards. I will not say that they were better acquainted with the sea which we call the Baltic. The details of the fictitious Orpheus, and the short extract from the historians cited by Diodorus, prove the contrary; but they conceived that lakes and rivers existed in the north, which led to the ocean. In effect, in conformity with an ancient tradition, it was over these waters that the Argonauts navigated on their return. We have no right to deny such a navigation, for it involves no physical impossibility. It presented to them, in their own æra, great difficulties on the score of art, but perhaps less, than, in our days, on the score of nature. We know, moreover, that, anterior to the Argonauts, the regions which they traversed had experienced great revolutions; and we can easily conceive, that, since their voyage, they have still considerably changed their face. They might have found navigable waters where we can scarcely detect rivulets, or even nothing but barren sands. This presumption becomes a certainty, if the diminution, which, according to Swedish writers, the waters of the Baltic are now undergoing, have always continued the same; for the diminution of the waters of this sea supposes that of the fluvial waters as well.'—Our author, after thus hinting at certain *Swedish* writers, refers alone to *Pallas*, in support of his conjecture. It is a conjecture, however, altogether unnecessary; and, in his sequel, he has pursued it to an extreme. Diodorus expressly mentions, that, having ascended the Tanais to its source, they disembarked, and *drew their vessel over land*, till they reached another river which ran to the ocean, by means of which they entered into the sea. The Argo might have been constructed with the express purpose of occasionally taking her to pieces; or, if not, as there was no necessity for her being otherwise than a small vessel, admitting the fact that the expedition was in part an *over-land* excursion, it might have been accomplished without any change whatever in the geography of the north. Our author, however, conceives that the Neva did not then exist, and that the Ladoga was joined to the Gulf of Finland; that the navigators carried their ship by land from the Tanais to the Volga; that, by the Volga, they entered the Tvertsa; that, after mounting this river, they again bore their vessel overland to the Msta, by means of which river they gained the lake Ilmen; passing

out of which, by the Volkow, they were conducted in a direct course to the lake Ladoga.

‘IX. Considerations on the Island of Juan de Lisboa. By M. Buache.’—From the imperfection of the science of navigation in former times, and the consequent inaccuracy of the most approved charts and measurements, it is not surprising that islands of considerable magnitude should occasionally be discovered and lost; at one period be regarded as real, and at another as fictitious; and hence have been admitted into some maps, and blotted out of others. Thus it has happened to the island of Romeiros or Juan de Lisboa, which, in the greater number of old charts, is placed in the 24° , 26° , or 27° , of south latitude, and at a small distance only from the meridian of the Isle of Bourbon, or the Re-union, as it is now called. As to its longitude, however, those who have pretended to have traced it, have differed in a greater degree still; and the extremes of opinion are from 54° to 73° ; which last position is assigned to it by captain Donjon, as the former is by captains Boisnot and Sornin, who assert they visited it in 1784. An expedition was fitted out by the French government in 1772, and another in 1782, to decide the fact; neither of which advanced, however, any further than to the degree of 66° , and, not finding it in the course of their navigation, determined that no such island existed. It is obvious, nevertheless, that, if the position of Donjon, or even of Texeira, who lays it down at 69° , be in any way correct, the testimony of these unsuccessful navigators is to no purpose. Yet such was the general skepticism upon the subject, not only in consequence of their report, but for many years anterior to it, that d’Après de Manneville, who published his *Neptune Oriental* in 1745, purposely omitted to notice it, and was followed by d’Anville, who equally neglected it in his map of 1761. M. Buache examines the various papers which relate to this subject and are entitled to any degree of attention; and the result of his researches is his full conviction of the existence of the island. Alluding to the discoveries of Gentil and Trobriant, ‘it is worthy of remark,’ says he, ‘that it is in the same space, between 65° and 70° of longitude, that the different positions occur which the greater part of our ancient charts have given to the Isle of Romeiros. Van Keulen places it in 65° ; William Delisle in 66° ; William Janson in 67° ; and Texeira in 69° . The site allotted to this island, or, at least, indicated, by Robert Dudley, corresponds exactly with Texeira’s chart in which it first made its appearance, and the author of which probably drew his information from an authentic source. So perfect an accordance would determine us to give a preference to this last position, could we make a choice between so many: but we limit our inquiries, by pointedly indicating one alone of these various communications, and which may prove sufficient to enable future

navigators to retrace the 'island.' A chart is subjoined, containing a comparative view of the different positions of Texeira, Van Keulen, Boynot, Delisle, and Dudley.

'X. Observations on the Origin of the Venereal Disease, and its Introduction into Alsace and Strasburg. By M. Koeh, of Strasburg, Associate-Member.'—We had thought this point had been so long since and so decisively settled, that all farther remark upon the subject was a work of supererogation. Not so, however, the writer before us, who conceives it necessary to combat the shadows, the mere ghosts of opposition, which, nevertheless, have long been laid by the necromantic hand of genuine fact, but which, unquestionably, made a momentary appearance about twenty or thirty years ago, in the forms of Sanchez Ribeiro, Heusler, and Swediaur; the first of whom pretended, that the disease, instead of being imported from America, arose spontaneously in Europe, as the result of an epidemic of the fifteenth century; the second, that it was a complaint well known to the ancients; and the last, that it was derived from the East Indies, in which country it had prevailed from time immemorial, and was definitively recognised by the name of *the Persian fire*. It is to Spanish writers alone that we are indebted for our first knowledge of the origin and progress of this detestable malady; and of these the most respectable are Hernandez de Oviedo, Diaz de Isla, Lopez de Gomara, and Sepulveda, whose history of the conquest of America, as well as that of Charles V., though compiled about the middle of the sixteenth century, yet, in consequence of their publication having been procrastinated during his life-time, and the MSS. lost on his decease, did not make their appearance till about two centuries afterwards; at which period they were accidentally recovered, and instantly printed, by the express order of Charles III. of Spain, and under the superintendence of the academy of Madrid. All these writers, several of them unconnected with and unknown to each other, most cordially unite in one common testimony and report, which is thus concisely stated in the words of Roderic Diaz, in his treatise *Tocante las Bubas*:—'This disease appeared in 1493, for the first time, at Barcelona; whence it spread itself through Spain and the whole of Europe. It derived its origin from the island of Hispaniola (St. Domingo), as experience has confirmed. Admiral Christopher Columbus had no sooner discovered this island, than his soldiers contracted the disease by their commerce with the natives. As the real nature of the disorder was not known to the Spaniards, they at first believed themselves to have generated it from the fatigues they had undergone, the inconveniences of their long voyage, or some similar cause. It happened, however, that, in his first return from America, admiral Columbus steered to Barcelona,

to give an account, to the Catholic king, of his successful navigation and discovery; when it was immediately perceived, that the venereal disease had disclosed itself, and even made a most alarming progress through the city. The horror which was hence universally felt, was so excessive, that, to obtain the protection of heaven, public alms were bestowed, and public fasts and processions instituted. At length Charles VIII. of France, having, in the following year, 1494, led an army into Italy, to conquer the kingdom of Naples, a variety of hostile Spaniards, who loitered in those domains, communicated the disease to the king's troops. The French, not knowing whence it proceeded, nor what name to give to it, attributed it to the infection of the air, and called it the Neapolitan disease; while the Italians and Neapolitans, who knew no more of it than themselves, denominated it the French disease.'—The chronicle of Matern Besler, written at the commencement of the sixteenth century, and preserved in the Schœpflinian library at Strasburg, states, that, in this very year (1494), the *French disease* suddenly made its appearance, in conjunction with the small-pox (*die bösen blattern*), in Alsace; and various other manuscripts in the same library attribute its first detection in Strasburg to the years 1495 and 1496. To account for these facts, our author observes, that, in this expedition against Naples, Charles VIII. had taken into his service a great body of Swiss and Lansquenets. These last were German bands, composed of people of every nation. Charles then retreating from Italy in the months of May, June, and July, 1495, a great number of such Swiss and Lansquenets returned, diseased, into their respective countries, as the historians of Charles VIII. expressly affirm; and hence the entrance of the disorder, in the course of the same year, into Alsace, Strasburg, and places much more remote. Our author conceives, moreover, and justly, that its instantaneous propagation was considerably assisted by the general depravation of manners, and the frightful spirit of libertinism, which at that time prevailed throughout Europe.

'XI. Memoir on a Literary Society established at Strasburg towards the End of the fifteenth and Beginning of the sixteenth Centuries. By the same.'—The society here referred to, is that commenced by Jacobus Wimpheling, who, following the example which was already set before him at Rome, Naples, Venice, Milan, and other towns of Italy, projected and carried into effect a literary institution of great celebrity and advantage to the cause of science, in the city in which he resided. Strasburg had already become famous for its printing presses; and the views of Wimpheling were nobly seconded by Jacobus Sturm, a pupil of this truly liberal scholar, and a magistrate of the same city.

'XII. Geographic Considerations on the Islands Dina and Marseveen. By M. Buache.'—The position, and even existence, of these islands, are highly doubtful. In Halley's chart of variations, they are marked at $41\frac{1}{2}^{\circ}$ of south latitude, and about 4° of east longitude from the meridian of the Cape of Good Hope. Captain Cook searched for them in this tract, with care and anxiety, in the course of his second voyage, but, to adopt his own words, perceived nothing that could give him the least hope of finding them. It appears from his relation, however, that he would have spent more time in ascertaining the fact, had not his men been, for many weeks anterior, compelled to subsist entirely on very old salt provisions, which they could not look at without disgust, and hence been extremely desirous of making into port: in consequence of which he steered for the Cape of Good Hope. These islands are, nevertheless, still suffered to exist in almost all our maps and charts. In lieutenant Roberts's atlas, prefixed to the third volume of Cook's voyage, they still occur; as they do also in Mr. Arrowsmith's very valuable geographic map of the world, printed so lately as 1794; although in this last they are expressly stated to be doubtful. M. Rouchon, on the contrary, has no doubt whatever on the subject: he has lately published a new edition of captain Marion's voyage in 1771 and 1772; and, in confirmation of the captain's opinion (who, by the bye, although in the very latitude in which they are laid down, never met with them), presents a correspondence between himself and M. Plettenberg, governor of the Cape, in which the latter expresses his firm belief of the existence of these islands. If they exist, however, it is certain they do not exist in the position commonly ascribed to them.—In an old vellum chart of Nicholas Caneiro, the Genevese, M. Buache found an island in nearly the same site, termed Dina Margabin; and the result of his researches, as communicated in the present paper, is, 1st, That this Dina Margabin is no other than the island of Bourbon, or the Re-union; and 2dly, That this single island of Bourbon, Re-union, or Dina Margabin, has been erroneously divided into two, and hence denominated Dina, and Marseveen. The conjecture is ingenious, and plausibly supported: and, at the close of the memoir, is introduced a section of Caneiro's general chart, embracing the disputed region.

'XIII. Memoirs on the Ethics of Cicero. By M. Bouchaud.'

'XIV. Memoir on the Ethics of Seneca. By the same.'—The parallel between these two celebrated philosophers is ably drawn, but offers nothing that needs detain us. M. Bouchaud does not seem to think that Rome gained any great accession of moral virtue by the introduction of any of the Grecian systems of philosophy; that that of Cicero derived its chief value from the proofs, or, at least, probabilities, it offers of a

future state; and that of Seneca, from the severity of discipline it enjoined, and the consideration of the vanity and inaptitude of all earthly felicities.

‘XV. On the Advantages of Cash to a State. By M. Toulangeon.’—This is a subject which has of late been so largely discussed among ourselves, that little novelty is to be expected from a quarter, where, from the circumstances of the times, it is necessarily so much less understood. ‘The richest nation is not precisely,’ says our author, ‘that which may possess the greatest quantity of cash. To render cash a real treasure, two things are indispensable; it must to be circulated rapidly, and suitably distributed.’ It is on this suitable distribution that public credit is principally founded; and as long as it continues, and possesses a solid foundation, paper-money may be most advantageously, and to any extent, employed. ‘The confidence, however, which engenders credit, does not,’ says he, ‘derive its only foundation from cash, or the articles which cash represents: it supposes and demands, in a far greater degree, a proper use and employment of it; it supposes conduct, prudence, order, punctuality, good faith. In supposing these, it exacts and produces them, and, along with them, every domestic virtue.’

‘XVI. Analysis of different Opinions on the Origin of Printing. By M. Danou.’—An ingenious treatise upon an interesting subject. The author opens it by some preliminary observations upon xylography, or manuscripts delineated on wooden plates, by means of the graver; and typography properly so called, whether with movable characters or stereotypes. He then divides his memoir into three branches; considering, 1st, The earliest productions of the art of printing; 2dly, The records of those who were witnesses of its origin; and 3dly, The different systems of the writers upon this subject.

‘XVII. Of the Metaphysics of Kant; or Observations on a Work entitled Essay towards a brief Illustration of the Elements of *Pure Reason*, by J. Kinker. Translated from the Dutch by J. le F. one volume, 8vo. Amsterdam, 1801. By M. Destutt-Tracy.’—To the metaphysical talents of M. Destutt, our readers are by no means strangers: we have often paid him the compliment of a detailed account of his labours, and have not infrequently admitted them to possess merit. In the instance before us, he takes the work quoted in the title as a sort of text book, by which to investigate the Kantian philosophy; and seems to conceive that it contains the best and most favourable representation of this new theory which has hitherto been offered to the public. M. Destutt admits, that he is not acquainted with the German tongue; and he knows of no book written by Kant himself, and translated into French, which enters so fully into this system, as M. Kinker’s. In

investigating, he progressively opposes it, and, in many parts, with considerable success. We cannot, however, follow him with any detailed analysis through a memoir of upwards of sixty quarto pages.

With this paper the volume closes. We wish we had seen reason, from our perusal, to speak more favourably of it than of the preceding; but the same paucity of subjects, prolixity of style, and, nevertheless, difficulty of filling up its bulk, continue to be its chief characteristics.

ART IV.—*Annales de Chimie.* (Continued from Vol. XXXVII. p. 528.)

Annals of Chemistry. No. 127—132 inclusive.

THE 126th number, of which our concluding article on this subject treated, was the last communication of importance in the forty-second volume of this truly valuable work. The forty-third volume, to which we now proceed, was published near the end of 1802, according to the French division, and commences with ‘A philosophic and chemical Examination of the Teeth. By M. Josse, of Rennes.’—The substance of the teeth is well known to be similar to bone, and to consist of phosphat of lime, with some gelatine; but the enamel has not been separately examined; and it has been concluded to be of the same nature, though more dense, by the closer union of its constituent parts. This, however, appears not to be true. The enamel is described as white, polished, transparent, very brittle, and extremely hard. Its fracture shows a regular determined crystallisation, formed by an assemblage of small, brilliant, very compact crystals, affecting a needle-like shape. It is constantly disposed in radii, a little oblique and horizontal, almost perpendicular to the body of the bone, forming with it a very acute and a very obtuse angle. The sulphuric acid does not act on the enamel, though it dissolves the bone; and, by this mean, our author supposed that he had procured the former in a separate state; but he afterwards found that it was not without having experienced some change. His experiments, therefore, in which he thought that he had detected the oxalic acid, appeared fruitless; and he was obliged to resign, for a time, his labour, after having found, in the enamel, acid, phosphat of lime, with some sulphat of the same.

‘General Considerations on Vegetable Extracts. By M. Parmentier.’—This is a most valuable elementary essay on one branch of pharmacy, and not the least essential, as it includes all the component parts of vegetables. The extract, or, in modern language, the extractive matter, is a substance solu-

ble in water ; and, after a careful evaporation, solid and transparent. It has, also, the properties of combining with acids, of powerfully attracting oxygen, of being precipitated by alum, metallic solutions, oxyds ; and, by means of mordants, of adhering to woollen stuffs. The pharmaceutic extracts are, however, compounds, comprising whatever water can dissolve of the vegetable, the new combinations formed during evaporation, and the soluble results of the different decompositions. One circumstance M. Parmentier has not noticed with sufficient distinctness : the extractive mass, during evaporation, combines with oxygen, and forms a resin, so that the extract is scarcely, in any instance, capable of being again completely dissolved. From the varieties of extracts we are led to the component parts of vegetables, which the author enumerates, and explains very fully. ' In place of this list, it were to be wished,' adds M. Parmentier, ' that we could offer an accurate analysis of each particular extract. This, however, is not in our power ;' and he proceeds to the enumeration of the ancient division of these extracts, and the means directed for their preparation. The memoir of M. Dechamps, published in this collection in 1799, is then shortly analysed, to give a connected view of the whole subject ; but the chief discovery of this author relates to the earthy (calcareous) salts of vegetables. Very useful and minute directions for preparing different medicinal extracts are then added, which the English pharmacutists might study with great advantage. We cannot abridge, and to copy them would lead us too far.

' Observations on some Phænomena offered by the Union of Iron with Silver and Lead. By M. Guyton.'—M. Gellart had declared that silver and iron united with ease ; but our author suspected, from his experiments, that they only possessed, for each other, an attraction, depending on an adhesion of surfaces between silver and iron. Lead and iron are the metals usually cited as instances of metals refusing to unite : it appeared, however, from experiment, that there was a proper chemical union ; but, from the metals flowing at degrees of heat so distant, some deposition took place. In the silver, he could not, by the nicest chemical test, find iron ; but the silver was magnetic ; and M. Columb discovered, from this circumstance, that it contained $\frac{1}{320}$ part of iron. By his magnetic experiments he can detect so small a proportion as $\frac{1}{1333000}$ of that metal. Iron and silver, when united, are peculiarly hard ; indeed, much harder than the best steel ; and this compound may be found very useful in the arts.

' Experiments on the Discolouration of vegetable Fluids by pulverised Charcoal. By M. Daburgua.'—From the experiments of M. Lowitz, we now know that charcoal will purify bad water, and destroy the colour of various fluids. As the

subject has, however, occasioned some controversy, and is not so well known as it merits, we shall add an abstract of the properties of charcoal, in these respects, so far as they have been ascertained by M. Lowitz, from our present author. 1. Three ounces and a half of charcoal, purified by heating, with twenty-four drops of sulphuric acid, will depurate three pints and a half of corrupted water, without communicating a sensible acidity. The water must digest with the charcoal and acid, and be afterwards filtered. 2. It destroys the astringent principle, the colour of the infusions of logwood, saffron, treacle, and a solution of indigo, in the sulphuric acid. In obstinate colours, the effect is hastened by heat. 3. It reduces metals to the ordinary temperature of the atmosphere. 4. It absorbs oily substances. 5. It dissipates the foetid odour of putrefied bitumen, balsam of sulphur, flowers of benjamin, salt of amber, bugs, empyreumatic oils, infusions of valerian, wormwood, onions, &c. 6. It has no effect on the smell of camphor, sulphuric æther, essences, native balsams, ætherial oils, essence of orange, &c. 7. It destroys the colour of vinous liquors, by decomposing them; of vinegar, and corn spirit, without altering their principles. 8. It lessens scorbutic affections, sweetens foetid breath, and whitens the teeth.

Our author's own experiments do not perfectly support those just mentioned of M. Lowitz. If added to the mock, it does not decompose wines; and, even, by cautious and not too long continued digestion, scarcely alters them afterwards. Vinegar it decomposes; for it reduces oxymel to simple syrup. The red colour was soonest changed; the violet was more slow in disappearing; the intermediate colours followed, in this respect, their order in the spectrum. This supports an idea we have before suggested, that the violet are the rays least changed by refraction, and least impaired, in their action, as light. Carbonic acid gas is copiously discharged in the process, and the odorous principle is not affected, as Lowitz supposed. It destroys the taste of gentian, but of no other bitter. In the conclusion, the author feels a little difficulty in explaining the action of charcoal. It seems to attract oxygen, as the carbonic acid gas is copiously separated; but its action is chiefly on substances which contain oxygen only in a small proportion, and other ingredients in a large one.

‘The Process for preparing the Black Oxyd of Iron, or Martial Æthiops. By M. Cavezzali.’—A paste is made with fifteen kilogrammes of very pure water; but the water must not be in excess; and it must be exposed fifteen days, in a wide vessel, to the air, adding the water as it evaporates. During this period, many bubbles of hydrogen gas appear; and, on the sixteenth or seventeenth day, the finest oxyd is procured by washing. The remainder, pounded and washed, is less fine.

The operation may be repeated till all the iron is oxydated. This process is cheaper and more commodious than M. Fabroni's. The summer is the most convenient season for the preparation; and the mass must be frequently stirred, to expose all the iron to the air. This process is, however, said to be copied, almost verbally, from the first volume of Medical Transactions at Brussels.

'A Continuation of the Essay on *Æther*; containing an Examination of the new State of Sulphuric Acid, and some of its Combinations. By M. Dabit.'—This paper relates to a dispute on the chemical nature of *æther*, which M. Dabit supposes to be only a new form of sulphuric acid. It is, however, too minute a question for discussion in this place. Our author calls it the sulphureous oxygenated acid; and its compounds, oxygenated sulphats.

'Experiments on the pretended gaseous carbonic Oxyd, or the carbonous Gas. By the Society of Dutch Chemists.'—The controversy, of which this paper forms a part, arose from some of Dr. Priestley's experiments, in his inquiries with a view to establish the existence of phlogiston. In reducing metallic calces, by means of charcoal, he produced a gas, in part fixed, and in part inflammable, air. 'If,' says he, 'fixed air be formed of carbon and oxygen, whence comes the inflammable air?' Mr. Cruickshanks, in repeating the experiment, thought that it was a new gas, *viz.* the carbonic acid air, partly deprived of its oxygen. He gave it the name of the gaseous oxyd of carbon, and supposed it to be inflammable; because it is, in part, deprived of its oxygen. The French chemists rather conceived, that, instead of the privation of oxygen, it was surcharged with carbon. Our authors, approaching nearer to Dr. Priestley and Mr. Cruickshanks, than the French chemists, imagine it to be a compound of hydrogenous gas and carbon, but allow that its appearance forms no solid objection to the pneumatic theory. M. Fourcroy, in his remarks on this paper, seems still inclined to support his own and his colleague's opinions.

'An Inquiry into the Dilatation of Gases and Vapours. By M. Gay-Lussac.'—This is a very ingenious inquiry, and a very promising specimen of a young man's talents. The critical remarks on the thermometer, as a measure of the increments of heat, and the historic abstract of what has been hitherto done on the subject, are acute and instructive. These we cannot follow; and must only add, that, in our author's very accurate experiments, hydrogen gas, atmospheric air, oxygenous and azotic gas, were dilutable very nearly in the same degree. If there were a difference, they should be arranged in the order given;—hydrogen gas being most, and azotic gas least, dilated with the same degree of heat. The range of heat was from

the freezing point to boiling water. The expansions of carbonic acid gas, muriatic acid gas, sulphureous acid, and nitrous gas, were the same with atmospheric air. Even ammoniacal gas, when depurated, by resting for a time on caustic pot-ash, to deprive it of water, was not more dilated by heat than any other air. The increase of volume, in each, in the range mentioned, was $\frac{80}{21333}$ of the original bulk, in a thermometer divided into eighty parts, or $\frac{100}{26666}$ of the centigrade thermometer. The dilatation of vapours will be the subject of another paper.

‘Observations on the Zoönic Acid. By M. Thenard.’—The supposed zoönic acid was discovered by Berthollet. The properties are,—the smell, resembling burnt flesh; being liquid in the common temperature of the air; volatile in a degree of heat inferior to that of boiling water; forming soluble salts with barytes, pot-ash, soda, strontian, lime, and ammonia; precipitating nitrat of lead, and acetat of mercury; spontaneously decomposing after some time, and depositing carbon. Our author, from his examination, seems to think it only an acetous acid, holding in solution an animal substance, approaching to an oily nature. The zoönat of lime deposited some flocculent animal substances, which were re-dissolved by means of heat; and, in the process, nitric acid was suddenly produced. At a certain point the substance seemed to have absorbed oxygen from the air. The event, however, appears to depend on a nice point of heat, for it will not always succeed.

‘Observations on the true Nature of Precipitates, formed by the Prussiat in Acid Solutions of Barytes, and on the Affinities of the Prussic Acid. By M. Guyton.’—The power of the prussic acid in precipitating barytes, was supposed to be owing to the metallic nature of the latter, while the impossibility of its reduction was variously explained. This appears, however, by no means true. It is not true that barytes did not decompose prussiat of pot-ash; and the precipitation, by the latter, from a solution of muriat of barytes, is the effect of a double affinity. Barytes also should be placed before pot-ash in the table of affinities. These are the conclusions which have been drawn from Mr. Henry’s experiments, which our author admits, while he denies that they support in barytes an approach to a metallic nature.

Among the ‘News’ (*Annonces*), we find some information from M. Humbolt. His letters are dated November 26th, 1801. He was then in his way to Quito, designing to set off for Lima in January, 1802; to pass the month of May in Aca-pulco and Mexico; and to return by the Philippines and the Cape. As we have lately said, he may be daily expected. A sketch of a geologic table of South America, communicated by him, is just printed.—M. Tromsdorf has discovered a new

gas, consisting of phosphorated hydrogen and carbon, which precipitates the noble metals from their dissolvents, in a metallic state.—Some accounts of books we purposely omit, as the abstracts are partial, referring only to the sciences of philosophy and medicine; and the more important ones we mean to consider more fully. The translations from the English are suppressed, as usual.

‘A chemical Examination of the Carica Papaya,’ (the pawpaw tree, a production of the isle of France, Peru, &c.) ‘By M. Vauquelin.’—This vegetable was supposed to be a powerful anthelmintic; but the trials in France did not succeed. From its chemical examination, it appears, in almost every respect, to come very near to the nature of animal substances.

‘An Abstract of a Memoir, by M. Ekeberg, on some Properties of the Yttria, compared with Glucine; and on two Substances in which he has discovered a new Metal, combined, in the first, with Yttria and Iron, and, in the second, with Iron and Manganese.’—The yttria, it appears, is insoluble in caustic alkalis; the glucine very easily dissolved. The most striking distinction between them is the precipitation of the former from its menstrua, by prussiat of pot-ash; a substance that does not affect the solutions of the latter, and which are precipitated by the succinats. The respective specific gravities of yttria and glucine are 4.842, and 2.967. In again analysing the gadolonite, the ore in which the yttria is found, M. Ekeberg discovered 4.5 in 100 of glucine. Our author precipitated the iron from the yttria, by means of the succinats; but these will not succeed unless the iron be perfectly oxydated. The gadolonite was found to contain, in 100 parts, 55.5 of yttria, 23 of flint, 4.5 of glucine, 16.5 of oxyd of iron: only 0.05 were lost. There were evident traces of manganese, and no lime; though some occurred in M. Vauquelin’s analysis. The loss was very little; but, in Vauquelin’s experiments, it amounted to 0.10 or 0.12. The new metal he calls tantalite; and, when combined with yttria, yttrotantale, because it does not combine with acids.

The tantalite was formerly known, in the cabinets, by the name of oxydated tin. The mountain in which it was found is formed of white quartz, mixed with mica, and divided by veins of red feldspar, which is the matrix of the metal. The pieces of tantalite are of the size of a nut, resembling oxydated tin, approaching the octaëdral form; the surface is smooth, black, and cat’s-eyed; the fracture compact and metallic, with shades of blue and grey in some of the specimens. Its powder is of a greyish brown; it strikes fire with steel; is not attracted by the magnet; and its specific gravity is 7.953. The yttrotantale is found in the same spot and the same matrix. The quartz, mica, and feldspar are separate, and do not form gra-

nite; for the feldspar is divided, vertically, by threads of mica. The gadolinite is attached, by one of its sides, to a white silvery mica; and surrounded, on its other side, by feldspar. The yttroutantale is generally enveloped in the last substance: its fracture is granulated, of a metallic grey colour. It can be scraped with a knife, but not easily; it is not affected by a magnet; and its specific gravity is 5.130.

This new metal is not soluble in acids, but is dissolved, in a large proportion, by alkalis, and again precipitated by acids: its oxyd is white, and not coloured by heat. When red hot, the specific gravity is 6.5. It melts in phosphat of soda and borax, without imparting any colour. The oxyd of tantal, heated with charcoal dust, agglutinates, and offers a metallic appearance, with a brilliant fracture, of a greyish black. Acids oxydate it, and reduce it to a white powder, as before. From all these circumstances, it appears to be a metal; and, in its relation to alkalis and acids, resembles tin, tungsten, and titane. Oxyd of tin, however, is easily reducible, and furnishes a ductile metal. Oxyd of tungsten dissolves in ammonia, becomes yellow in acids, and gives a blue colour to borax and salt of urine. Oxyd of titane is soluble in acids, when divided by alkalis, and communicates the colour of hyacinth to borax.

‘Experiments on the Water contained in Gases, and on some barytic Salts. By MM. Clement and Desormes.’—These authors found, from their former experiments, that hydrogenous, azotic, oxygenous, and carbonic acid gases, exhibited the same proportion of water. Some chemists have, however, supposed that these airs contain combined water not sensible to the hygrometer; and, consequently, unnoticed. It is particularly in the fixed air that this combined water is supposed to exist; and the probability depends on some circumstances in Dr. Priestley’s experiments on the composition of water, which, when repeated, were found fallacious. It appears, from our author’s experiments, that hydrogen decomposes the carbonic acid; that the affinities of oxygen with hydrogen and carbon depend on circumstances hitherto unknown; and that none of the gases mentioned contain water in a state of chemical combination.

These experiments led our authors to an examination of barytic salts. Carbonat of barytes contained 0.78 of earth; sulphat nearly 0.68; nitrat 0.60.

The 129th number, and the forty-third volume, concludes with an easy method of making the red ochre used in polishing, commonly called crocus martis. Hats are blackened by sulphat of iron; and, if a piece of hat be plunged some minutes in sulphuric acid, diluted with water, the iron will be precipitated in a red impalpable powder. It is generally made from colcothar, very finely levigated.

The 130th number, the first of the forty-fourth volume, commences with an abstract of 'an Essay on the Poisonous Effects of Nitrous Acid. By M. Tartra.'—While authors speak of this acid as a violent poison, and point out the remedies, they have neglected, in our author's opinion, to speak of the symptoms which show these effects, or the circumstances which favour its action. The essay is unreasonably extended by trifling and inapplicable discussions; so that we shall only notice, very concisely, the most important parts.

The acid does not act at once, and there is time to neutralise a part of it by soapy and alkaline medicines, before it has produced its full effect. In the enumeration of the symptoms, we find none which will point out that *any* acid has been the poison employed. They are such only as show violent inflammation of the stomach. When not fatal, the consequences are, weakness, and increased sensibility of the stomach in different degrees. Our author thinks these may sometimes, though very rarely, be wholly removed. This, however, appears to us highly improbable. When swallowed unintentionally there is the greatest reason to expect more complete success, as relief is soonest obtained. The method of cure is pompously detailed; but it consists only in neutralising and evacuating the acid, and in relieving the complaints arising from the violent stimulus. In the forensic part of the essay, the only question of importance is, whether a person, found dead, has been poisoned by nitrous acid? To this, the reply is vague and unsatisfactory; as is, indeed, in our opinion, the whole memoir.

The 'Extracts from Crell's Chemical Annals' contain some observations of importance. A new saline mineral substance, from Cornwall, is described and analysed. It appears in the form of a powder, or in small irregular masses, slightly cohering; externally yellow, internally white; brilliant, when cut. It is dry to the touch, astringent in taste, and brittle. It chiefly consists of oxyd of zinc, sulphuric acid, and the water of crystallisation: the manganese is in the proportion of 0.04; the iron and copper inconsiderable.

The next article is an analysis of a Siberian beryl, with some distinguishing characters of its glucine. Flint, alum, and glucine, are its principal ingredients; and, in 100 parts, there are, respectively, of each, 54.75, 24.41, 15.4, with a little iron. The differences of the glucine in this mineral from other specimens are too minutely chemical to detain us.

The pharmacolite analysed by M. Klaproth, is found near Wittichin, in Furstenberg, in the cavities of granite rocks, which contain cobalt. It appears in small, white, capillary crystals, partly collected in little nodules, partly in little tufts; rarely prismatic; with the brilliancy of silk; accompanied occasionally with the red efflorescence of cobalt. Its specific gravity is 2.64. It

contains, in 100 parts, 4.65 of arsenic, 23 of lime, with a little cobalt, and much water of crystallisation.

M. Hahnman has asserted that pure ammonia will not dissolve copper or its oxyd; but that the solutions are effected by the intermedium of carbonic acid. M. Hildebrandt shows that ammonia, diluted with water, will not dissolve copper without the access of atmospheric air, but that pure ammonia will dissolve the oxyd without its acid. When a solution takes place without the access of air, the fluid is not coloured, but assumes its characteristic hue on being poured out in a saucer. The blue beryl of Siberia, analysed by M. Schaub, contains flint and alumine in the proportions of $66\frac{1}{2}$ and 16, with about 0.15 of glucine.

‘Chemical and Medical Inquiries and Experiments on the Diabetes Mellitus, or Saccharated Phthisury. By MM. Nicolas and Guedeveille.’—Our authors, in consequence of their experiments, offer a new theory of diabetes, with this singularly happy motto from Lucretius: *Dulces, inter salsas, intervomit undas*. Though the fresh water of rapid springs, rising through the saline impregnation of the sea, as described by Lucretius, is not wholly in the *spirit* of the author, the detached passage is well adapted to the present purpose. Their appellation of the disorder, phthisury—a hectic, connected with a discharge of urine—is well compounded. These authors differ from Dr. Rollo; but, like all the French medical theorists, are vague in their language and terms. The description of the disease is full and satisfactory; and they prove that the disputes of Riolin and Bartholine first elucidated the nature of phthisury, the honour of which is attributed to Dr. Rollo. Their object is to show, that the disorder is peculiar to muscular persons; in which they certainly fail. They remark, however, that the abdominal spasm, the frequent calls of muscular habits, do not allow the nutritive juices sufficient time for their animalisation, sufficient delay to combine with azote. If we reject the vague language of ‘abdominal spasm,’ and the ‘frequent necessities of muscular persons,’ which convey no ideas, the theory will be that of Dr. Cullen, that it arises from an imperfect assimilation. We have seen eight or nine instances of it, but all were in advanced life, except one boy, whose natural constitution was by no means strong. It is contended, however, from the histories recorded by Morton, Rollo, Falconer, and Cleghorn, that it is a disease of muscular temperaments. Dr. Cullen considered the increased discharge as from spasmodic action, though the foundation was a weakness in the digestive organs.

The seat of the disorder they consider, very properly, in the same view; and the gastric, the pancreatic, and biliary fluids, are changed by the presence of an unanimalised fluid, carried, as an injurious substance, to the urinary organs. The urine contains

neither the urea, the uric, nor the benzoic acids: the ammoniacal and phosphoric salts are in a very small proportion; and this fluid becomes vinous and acetous. Alcohol, of a disagreeable smell, may be drawn from it, with a crystallised sugar, whose peculiar nature is yet unknown: it appears to be a saccharated mucus, rather than sugar, since it is decomposed by lime. The blood is very serous; its ammoniacal and phosphoric salts in a very small proportion: the fibrin scarcely discoverable. The whole apparently depends on a defective assimilation, from a want of azote. The remedies are diet, and medicines which contain copiously the azote and phosphoric salts. Among these, animal food holds the chief rank; but this, they remark, was recommended by Aretæus, Paul of Ægina, Morton, Riverius, and Mede. Of the antispasmodics they prefer opium and musk. The bark they think useful; and speak favourably of frictions with lard, and more so of liniments of oil of almonds and volatile alkali. Why may not such a portion of azotic gas, as can be breathed with safety, be inhaled into the lungs?

‘Abstract of a Memoir on Dew. By M. Benedict Prevost.’—We had lately occasion to notice this phænomenon, and to point out, in the deposition of dew, a singular repulsion, as it appeared, in metals, to condensing dew. A rim of metal round glass not only continued dry, but the dryness extended to some distance. M. Prevost examines the circumstances of this experiment minutely, and varies it with great ingenuity. All the facts are summed up in the following proposition, in which *armure* means a metallic plate fixed to the glass, and *armée* the glass plate so prepared:—‘The glass which separates two masses of air, of unequal temperatures, seems to accumulate or repel the humidity, according as it is *armed*, on the warm or the cold side.’ The explanation rests on the simple fact of metals being better conductors of heat than glass. The glass also seems to exercise its attraction for humidity through metals. It is impossible, at this time, to enlarge on the subject. We may, however, add, that the generalisation suggested by the author, explains all the appearances which he observed; but, if our recollection do not greatly fail us, it will by no means explain the phænomena recorded by the diligent and attentive Muschenbröek.

‘A Note relative to the observations of M. Prevost on Fourcroy’s late Work,’ we cannot enlarge on. ‘The Minutes of the Session of the College of Pharmacy,’ containing chiefly the titles of dissertations, and the names of those rewarded with the prize, would be uninteresting. Some of the best essays occur in the subsequent numbers of the Annals. ‘The Prospectus of the Annals of the National Museum,’ a periodical work of extensive information and peculiar interest, follows.

‘A Memoir on the Wax-Tree of Louisiana and Pennsylvania. By C. L. Cadet.’—Numerous plants afford, by boiling, a suet, or

wax; in other words, a fixed oil, saturated with oxygen. The light down, called the flower of fruits, which silvers the plumb and other drupæ, is wax, as M. Prevost has demonstrated; but the plant which affords it in the greatest abundance, is the *myrica cerifera*. M. Alexander first described this tree in the History of the Academy of Sciences, in the years 1722 and 1725. The wax covers the kernel of the fruit, is more brittle than common wax, and of it the inhabitants make candles. M. Alexander found it a useful medicine in dysenteries. Three species of the wax-bearing-myrica are known; but M. Ventenat thinks, that all the myricæ afford some proportion of this substance. Our author transcribes what has hitherto been said on the subject, and then delineates the fruit from his own observation, adding a comparative analysis of this substance and the wax of bees. The vegetable wax is of a greenish yellow; of a greater consistence than bees' wax; dry, and sufficiently friable, to be powdered; in fact, more oxydated than other wax. Candles made with it, burn with a white flame, do not run, and exhale a balsamic odour, supposed, in Louisiana, to be salubrious. Alcohol dissolves it; æther more perfectly, but the colour still remains; which is weakened by diluted sulphuric acid, more so by the oxygenated muriatic acid, and wholly destroyed by pure alkalis. By distillation, the results are the same as with bees' wax. The vegetable wax contains the gallic acid, and is hence supposed useful in dysenteries. It may, our author thinks, supersede the use of galls. Litharge dissolves in it; but the plaster is too hard for chirurgic use, without the addition of oil. M. Cadet is of opinion, that the *myrica cerifera* may be accustomed to a European climate, and become a valuable material in medicine and the arts. Some remarks on its cultivation, and the means by which it has flourished in the sandy plains of Germany, are added.

'A Memoir on the different Alterations produced by the Action of different Bodies on Muriats of Mercury. By M. Boullay.'—This is a very valuable pharmaceutic essay, since it points out the influence of various fluids, and other circumstances, on the solutions of corrosive sublimate, not hitherto suspected. Light separates a small quantity of the oxygen and acid, bringing the salt partly back to the calomel. Charcoal decomposes the salt, a circumstance not before known: Fourcroy expressly observes, that it has no action on it, employed either hot or cold. Phosphorus has a similar effect, producing a phosphure of mercury. Gum, sugar, extractive matter, fresh plants, the distilled water of plants, alcohol, aromatic alcohols, fixed oils, resins, &c., have a greater or less power of decomposing it, and bringing it to the state of *mercurius dulcis*. In cold, the quantities necessary for the change are only required to be greater; and heat considerably assists the decomposition. In

a high temperature, it is soon reduced to its first principles, by phosphorus and every substance containing carbon. As gum, sugar, and distilled water, have the least action on this salt, these should be its chief vehicles. The nitric acid dissolves it, when hot, without alteration; and corrosive sublimate may be produced, by dissolving mercurius dulcis in nitric acid by means of heat.

M. Chevenix informs M. Vauquelin, that nickel, as well as cobalt, is attracted by the magnet; but that the presence of arsenic seems to disguise this property in these metals, as sulphur hides the magnetic property of iron itself. An improvement here offered in filtering-funnels we can scarcely render intelligible within a short compass.

'Memoir on the Manufactures of Baked Earth, and particularly on the Potteries. By Fournay.'—It is a great object in France to imitate the English potteries; and our author engages in some disquisitions with that view; but, if his inquiries have been crowned with any success, it is concealed: his work, from the present abstract, seems to give some useful general ideas, but is not peculiarly interesting.

'A Memoir contributing to the History of that Part of Electricity called Galvanism. By MM. Desormes and Hachette.'—The discovery of minute portions of electricity is owing to the doublers first invented by Mr. Bennett, the theory of which is not yet wholly understood. Our authors find that the doubler may be entirely deprived of its electricity, either accidental or communicated; and that it is again charged from the attraction of electricity, resulting from the proximity and parallelism of the plates; the nature of which depends on their affinity for either the positive or negative kind. The causes of spontaneous electricity are common to the condenser and the doubler; and as the latter is composed of disks extremely small, equalling, in power, the large condensers, it will more easily show spontaneous electricity, and its results will be less equivocal. A new and interesting application of the doubler is to vary the electricity; but this we cannot explain within our limits.

The lectures on astronomy by M. Hassenfratz, we have already noticed; and M. Guyton's remarks on Mr. Mitchell's proposed changes of the new nomenclature, will not be interesting, as they are trifling, and not likely to be generally followed. Some curious but not very important experiments on the detonation of oxygenated muriats, conclude the number and the 44th volume.

ART. V.—*Histoire du Galvanisme, et Analyse des différens Ouvrages publiés sur cette Découverte depuis son Origine jusqu'à ce Jour. Par le Cit. Sue aîné, Professeur, &c.*

History of Galvanism, and Analysis of the different Works published on that Discovery from its Origin to the present Day. By M. Sue the elder, Professor and Librarian of the School of Medicine and Surgery at Paris. 8vo. Bernard.

GALVANISM is now become an important object in the operations of nature, and in the functions of the animal economy; nor is its curiosity lessened by the discovery of its affinity to electricity. From this connexion, we are rather led to view the electric fluid in a greater multiplicity of forms, to admire its more extended circle and more varied influence. From the present sketch, we may hope to penetrate deeper into the mysteries of nature; and as, from the late experiments of Aldini, we approach nearer to the solution of some problems of the animal economy which seemed to mock the powers of human inquiry; so, from the glance before us, we may occasionally expect still further improvement. It has, therefore, been a source of great regret, that the knowledge of this curious subject has not been more generally disseminated in our own language. The history of Galvanism, and the outlines of what is already known of its powers and effects, will, perhaps, induce other philosophers to labour in this field, which promises so plentiful a harvest. We hasten therefore to announce the present work, which will, at least, afford a good foundation. Every day adds to our knowledge; so that in this, as in other progressive inquiries, complete perfection cannot be expected. Should the history before us be translated, and we trust it will be, various improvements must be added from the various volumes of journals and transactions published since its appearance. Though the period be short, the number of these is not inconsiderable; and almost every one is valuable.

M. le Sue is, we believe, the son of the translator of Dr. Monro's Osteology, which he illustrated with plates of singular, and at *that* time unrivaled, elegance. He prefers the form of a history; and, when we recollect how much information Dr. Priestley has collected in his histories of electricity and optics, in the most pleasing manner, we cannot but be partial to his choice, and almost agree with the author in his motto: "*Historia, quoquo modo scripta, delectat.*" He prefers the chronologic order; and, by the progress of the science, is enabled to reconcile many apparent contradictions, which have arisen from the different views that have been taken of similar facts, when first offered to notice, and which have afterwards been more clearly understood. We were pleased to find him using the

ancient measures, though he apologises for it, by alleging the necessity a historian is under of quoting with fidelity.

The work consists of nineteen chapters. The first contains an account of the origin of Galvanism; which we noticed very early as owing to the accidental circumstance of a shock experienced by a student of medicine*, while dissecting the intercostal nerve of a mouse. Galvani first repeated these experiments, which threw a considerable light on animal electricity. The most interesting circumstances relating to this discovery, are taken from the *éloge* of Galvani, by M. Alibert. M. Galvani thought that animals possessed a peculiar kind of electricity, inherent in their economy, particularly residing in the nerves, which communicated it to the whole body; and that the muscles were the reservoirs of that fluid, which he styled 'animal electricity.'

In the second chapter we find an account of twenty-two experiments, made by M. Valli before the Academy of Sciences, pointing out new processes for the excitement of animal electricity, the best armatures for that purpose, with numerous varied appearances from the trials on different animals. The same experiments were afterwards repeated before the Society of Medicine; and next M. Maudent declared, that the phenomena, which he witnessed, seemed to depend on common electricity, but that they proved two additional facts—1st, that metals were charged with a different proportion of an electric fluid, the excess of which, on contact, was discharged; 2dly, that the animal economy, affected by it, was a much more delicate electrometer than any other hitherto known. In this chapter, M. Valli appears to have added some new facts, concluded from additional experiments:—1st, to excite shocks in a frog newly killed, a single metallic conductor is sufficient; that gold, silver, lead, copper, produce, in general, no effect; 2dly, that animal electricity passes through glass and wax, if heated; 3dly, that boiling water destroys the effect of this electricity; 4thly, that ice is a non-conductor of this fluid; 5thly, that the feet of certain animals remain immovable, when one person only makes a part of the chain. A letter of M. Desgenettes to M. la Metherie draws some reflexions from this philosopher; who establishes it as a principle, that the electricity of a prepared frog is very feeble, and that it is strongest at the moment when the animal is deprived of life. He afterwards points out the order in which different substances, considered as conductors of animal electricity, should be classed.

In the third chapter, the author gives an account of the labours of MM. Larrey and J. J. Sue, who repeated the experiments

* The name of this student should be recorded. It occurs in our journal, though we cannot, at the present moment, find it.

of Galvani and Valli on different parts of the human body after amputation. M. Vassali-Eandi, in a letter to M. de la Methe-rie, observes, that he cannot pronounce with certainty on the cause of the phænomena produced by Galvanism, but that he is *tempted* to believe, that the muscular contractions are owing to the motions of animal electricity, directed by the conductor of the natural electricity. We now know that no animal electricity exists distinct from the natural.

In the 4th chapter, we find some very interesting observations from M. Berlinghieri, which teach us to vary and simplify the experiments on Galvanism. They contain some observations on the time that muscular irritability continues.—The fifth chapter includes the prize questions offered by different societies on the subject.

The sixth is dedicated to inquiries on vitality and irritability; the seventh to dissertations on Galvanism. The subjects are certainly related; and the former includes the physiologic dissertations of MM. Josse and Sue, in which the difference between sensibility and irritability is stated very clearly; in the latter, the learned dissertations of M. Reinhold are inserted, which are examined with critical acumen. These dissertations trace the origin of Galvanism, its effects on animals and vegetables; the means of exciting it, and the different theories to explain it.

The eighth chapter contains the abstracts of Dr. Fowler, of MM. Creve and Fabroni, with the experiments of M. Boislier on irritation. Dr. Fowler rejects the theory of Valli, who compares the Galvanic influence to that of the Leyden phial. He next inquires into the connexion between Galvanism and magnetism; and, lastly, investigates the relations between Galvanism and the vascular, nervous, and muscular systems of animals. MM. Creve, Fabroni, and Boislier, have been most diligent in their investigations respecting the decomposition of water by metals.

In the ninth chapter, the learned and successful labours of M. Volta commence, by which the identity of Galvanism and electricity is proved. In this, and the tenth chapter, we find a description of various instruments which have furnished the Parisian philosopher with the means of distinguishing the positive and negative electricity of different metals. The arguments in opposition to M. Valli's theory, are stated also with the strictest impartiality.

In the eleventh chapter is a detail of experiments made in the School of Medicine at Paris. Those on inanimate bodies respect the decomposition of water, sparks, attractions, and repulsions. Those on animated bodies, are shocks, tastes, flashes of lightning, &c., according to the part affected.

The twelfth chapter contains the report of M. Halle, entitled,

'An Account of Galvanism, presented to the National Institute.' The reporter considers, in succession, the essential parts of the animal arch in the Galvanic circle, and their respective dispositions, with the influence of those parts of the exciting arch which are distinct from the composition of the circle, but which have an evident influence on the success of the experiments. He points out the methods of varying, enervating, or re-establishing, the irritability of animals; and, lastly, ascertains the identity of Galvanism and electricity; leading us to expect some applications of the doctrines, which will improve the art of healing.

The 13th chapter contains an extensive abstract of M. Humbolt's experiments on Galvanism, translated from the German by Jadelot. These experiments agree in proving, that an animal, one of whose organs is placed in contact with a metal, styled its armature, experiences, many hours after death, contractions, when a person touches, with the two extremities of another metal, the armature and the neighbouring muscles. M. Humbolt considers the muscles as containing the stimulus which produces the phænomena of Galvanism; and he points out the conditions necessary to render the metallic irritation efficacious, while the irritability lessens. His theory is founded on the existence of a peculiar fluid in the organs, and its accumulation in consequence of the obstacles which it meets with: and he concludes with admitting some relations, as well as some differences, between the electric, magnetic, and Galvanic fluids.

In the three following chapters are collected the memoirs and observations of MM. Pfaff, Van Mons, Litter, Fourcroy, Vauquelin, Thenard, &c. The first of these authors endeavours to invalidate Humbolt's hypothesis on vitality. The rest examine the facts already published, point out others, discuss the various theories, and endeavour to improve the powers of the apparatus. The three last authors think that they find combustion in proportion to the surface of the disks.

The 17th chapter contains the experiments of Dr. Woolaston, designed to show, that the oxydation of a metal is the principal cause of electrical phænomena; the inquiries of M. Cantherot, who, with some others, considers Galvanism as owing to an unknown principle connected with electricity; the physiologic observations of MM. Dumas, Bichat, Richerand, &c.; a description of the new apparatus of M. Simon; with the facts and anecdotes hitherto published.

The two last chapters complete the history, by the insertion of M. Volta's memoir, read a second time to the National Institute; the detection of the electric oxyd by Bragnatelli, with the applications of this new agent to the art of healing.

We shall not pretend to complete this history, by annexing

the discoveries which have occurred since the publication ; we may be allowed, however, to add, that these most fully support the identity of the electric and Galvanic fluids ; and that the sanative effects of Galvanism appear, on the whole, to promise us a valuable addition to the resources of medicine. The Galvanic society instituted at Paris, pays a very marked and pointed attention to the medical powers of the fluid of that name.

We very early showed, that Galvanism and electricity were nearly connected, and that the effects of the former depended on its application in a peculiar form, or on its accumulation in the apparatus : in short, we styled the Galvanic pile a condenser of electricity. When naturalists examined the electric ray and the electric gymnotus, they discovered an arrangement of parts, whose use they could not understand ; but they knew it was peculiar to those animals, that it consisted of cells which received a large proportion of nerves, and that the phenomena were electrical. They did not, however, comprehend an electric battery without the necessity of charging, or of a charge whose efficacy was scarcely diminished by a stroke. The Galvanic phenomena were first rendered conspicuous by a nervous influence ; and the Galvanic battery, though limited in its powers, did not, however, require, after each discharge, a recruit. It was reserved for Aldini to show, that the nerve might make a part of the arch in such an experiment ; and that, in reality, the Galvanic power in the nerves is an essential part of their structure, and terminates only with the vital principle ; that, in reality, the animal structure is Galvanic, so far as muscular contraction is concerned, which, in effect, comprises *almost*, if not exclusively, all the vital functions.

Let us make one other step, in a few words. The powers of the Galvanic pile are limited by the oxydation of the disks. The animal machine is comparatively uncharged and weakened only by exertions. We know that Galvanism decomposes the water, and oxydates the metals. In water the azote predominates ; and animal fluids are azotic : the most excrementitious ones are azotic in a great degree, or, as they are styled, highly animalised. Thus, in the animal process, by the constant powers of Galvanism acting in producing the muscular motions, the watery fluid is expended, and we require a supply ; the azote combines with the fluids, and is thrown off ; the oxygen gives out its caloric, and supplies the body with heat.

ART. VI.—*Du Droit naturel, civil, et politique, &c.*

Dialogues on natural, civil, and political Law. By E. Luzac, LL. D., late Advocate in the Courts of Holland and West-Friesland. 3 Vols. 8vo. Amsterdam, 1802.

SUBJECTS of law and moral science are less exposed to repetition and verbosity in continued treatises, than in colloquial dissertations: yet, if the garrulous simplicity of conversation allure inexperience to investigate serious duties, we can cheerfully sacrifice taste to utility.

Before the death of Dr. Luzac, the prospectus of this work had been published. To his decease, and to the political circumstances of Europe, the delay of its appearance is attributed. His anonymous editors now flatter themselves (we fear, in vain), that the moment is favourable to learned meditation; and fondly hope to recall, by this publication, the genuine principles of society, and to re-establish the harmony of the universe. His lucubrations, peculiarly intended to educate politicians and lawyers, the author has informed us, in an introductory address, were collected and arranged for the children of a friend, whose name is suppressed.

The prominent subjects of these volumes we shall enumerate, and copy, in English, a few specimens of their moral theory.—The work commences with elementary disquisitions on human sensation and intellect, and on the foundations of law and morality. The minuter intricacies of *practice* are subsequently unraveled. The first volume, in twenty-one conversations, develops, with adequate prolixity, these subjects,—the uncertainty of human knowledge; the sources of moral law; illusions of sense and understanding; the degree of certainty attainable by our natural powers; the formation of ideas; mental energies and defects; motives of human action, as influenced by the desire of self-preservation and enjoyment; regulations of conduct; the prevailing harmony in the universe, hypothetically considered as governing the natural rights and duties of mankind; general principles deduced from this hypothesis applied to particular cases; duties of man to himself in a state of nature; treatment of morals as a system; application of logic to moral and political discussions; the origin of social intercourse; conjugal connexions; natural communities; rights of dominion and property in a state of nature; and various systems of instruction.

From this volume we shall extract the essence of the *ninth* conversation, which, in a most diffuse style, examines ‘*the different principles adopted as fundamental laws for human conduct, and the harmony which prevails in the universe considered as the*

basis of the preservation, the duties, and the natural rights of mankind.

The operations of the senses and of the understanding are first discussed. The author endeavours to prove, that *self-preservation* and *enjoyment*, which constitute the motive principle of humanity, must also be a law prescribed by nature. This law, however, taken in a general and indeterminate sense, must, he asserts, be inefficacious to guide us in innumerable cases which may actually occur in the course of life, and, consequently, some *universal* principle, some first source, to which we may refer every rule of action, is required. The basis of other systems is next surveyed: the *order of the world*; *sociality*; *utility*; *popular consent*; *desire of happiness*; *self-love*; *benevolence*; *original destination*; *perfectibility*; *inclination to good*, and *aversion to evil*. To all these theories various arguments are opposed, and a *new* system is erected, of which we shall attempt to give a slight delineation. The preceptor, *L'Oiseau*, addresses his pupil, *Maurice*, on the system of harmony, which we now abridge.

‘*L.* Moral perfection consists in the concurrence of many parts tending to a determinate end—original destination. A watch may be perfect in itself, yet not adapted to the use required: a ship competent for a voyage to France, England, or Holland, may be unfit to navigate the Indian Sea. Perfection must be relative to the use for which the subject is destined. It is not sufficient, that man should be perfect in a sense which has been before discussed; but *his perfection* ought to attain the end which it is intended to serve, and for which he is destined—the *preservation* and *enjoyment* of life.

‘Reflecting on this end of being, when we discover that every individual of the human race has a similar tendency, we must admit the necessity of a concurrence of individuals to one point. We all feel, that, as we are alike animated, the same inclination, the same motive, must necessarily produce an internal irritation equally exciting all to the same end. Such is the operation of combined or compound forces in physics. Horses well harnessed, move a carriage according to the impulse communicated by the charioteer: hence results an operative combination of different agents. This combination, this accumulated action, we denominate *HARMONY*. Concerts of music afford a clear example. You perceive *harmony* in music, when different sounds, produced by the touch of various instruments, excite one sound, a compound of the rest. Musical *harmony*, therefore, is the sign of *perfection* in a piece executed by many musicians; and its existence is necessary to raise the pleasing sensation with which we are affected. You will consequently admit, that a facility of self-preservation and enjoyment can-

not prevail in the world unless harmony reign; and human happiness must differ in degree as this harmony is more or less correctly supported.

‘*M.* All this, sir, I comprehend; and am disposed to consider harmony as the first and general principle by which human action should be regulated and determined. If all men were directed by this rule, we should not see the world so often violated by rapine; nor would our hearts be so sensibly affected by those scenes of horror of which France is now the unhappy theatre, and which almost induce us to abhor mankind. I have already heard it inculcated, that harmony should be preserved between friends, in families, among the members of society, between the governors and the governed.

‘*L.* Objects in nature, continually appealing to our ears and to our eyes, inculcate this truth with equal energy.’ Vol. i. p. 152—154.

The author, proceeding, reasons at large on the *general harmony of nature*, produced by the united action of the heavenly bodies, the seasons, and other influences. Inundations, earthquakes, and many seeming exceptions and irregularities, he estimates like the dissonances sometimes introduced into music, to *heighten* the harmony: considered in particular, they appear extraneous; but, as relative to the whole, are necessary to its perfection. The human frame, and the harmonious action of different parts of the body, are next examined.

To objectors, the author replies:

‘It may be said, that, of this principle, I have merely a confused notion; and I confess it, if the assertion imply, that I have neither a perfect, nor a distinct, nor an entire comprehension of what produces this harmony, in what it consists, how it acts: but if it be concluded, that an idea, sufficiently clear to authorise an application of this principle as I apply it, be wanting, I deny the inference. I know not what occasions the harmony of many instruments of music heard together at the same place and moment; but I can accurately distinguish the sound which results when musicians are *tuning*, from that which they produce when, being completely in tune, and all playing together, each exactly executes his part. When I hear a harmonious sound, of whatever nature, I can distinguish the harmony, although unable to divine its cause.’

The theory of the preceptor is thus recapitulated by the pupil.

‘*M.* In all which the universe presents to our view, we discover harmony: not only a concurrence of powers and movements in parts, but a co-operation which preserves the universe itself co-existent with its changes. A similar harmony is ob-

servable in every species and every individual, for particular preservation. In proportion as this harmony is disturbed or destroyed, the objects also tend to their destruction. We infer that the universe is preserved in its parts and its changes by this principle; and that the divine will, which gave being to the world as it exists, has established *harmony* for its preservation, as the first law of nature—a law *general* for the universe at large, and for its individual parts, particularly for mankind. Harmony, therefore, is the basis of the preservation of the human race, and the individuals of which it is composed.' Vol. i. p. 160—161.

Pursuing this principle, Dr. Luzac defines *society*, 'the state of two or more persons assembled to act in concert towards a certain end, with relation to that end.' The existing together, even without a voluntary convention, is society, or the union of individual will to a common purpose, mutual concurrence to well-being. Such is the theory of *general society*. Laws resulting from these general social relations, from the animal nature of man, and from particular conventions, are afterwards examined.

In the *second* and *third* volumes appear the ramifications and luxuriant foliage of this system. The duties of man to his neighbour, communication of opinions, solemnity of oaths, modes of acquiring property, morality of human actions, benevolence, general and particular contracts, personal responsibility for others, bailments, exchanges, loans, commercial associations, purchases, money, interest, usury, insurances, risques, and bottomry-loans, are subjects minutely discussed.

We have concisely *translated* a specimen of the theoretic part, and shall now furnish *original* extracts on topics of business.

Had the dialogue been more laconic on the 'exportation of grain,' we should have copied it entirely, as an example of liberal and enlightened dissertation on an interesting commercial and political object. We can only admit abridged subjects; and shall select those of 'commissions,' and 'partnerships *en commandite*,' which are explained in the following mode:

'Si le commettant veut, que le commissionnaire contracte en son nom, et que celui-ci satisfasse, l'obligation, qui résulte de son fait, naît entre le commettant et celui avec lequel son commissionnaire a traité. Tel est le cas d'un achat que vous auriez fait faire d'un cheval, et que le commissionnaire auroit dit au vendeur, qu'il le faisoit sur vos ordres et pour votre compte.

'Mais si quelqu'un exécute vos ordres en son propre nom, s'il loue, s'il achete, vende, ou fasse quelque autre chose pour le commettant, mais non pas de sa part et en son nom, l'obligation qui en provient est entre le commissionnaire et celui avec lequel il a traité, et non pas entre celui-ci et le commettant.

C'est là le cas du commerce en commission. Le commissionnaire vend, achète, fait tout en son nom, et comme s'il agissoit pour lui-même.

‘ Lorsque quelqu'un veut traiter avec un autre, au nom d'un commettant, il est naturel, que celui-ci, pour lequel on s'annonce, en a véritablement donné la commission. On nomme indifféremment *commission*, *procuration*, *mandat*, *plein pouvoir*, la marque par laquelle il conste qu'une commission a été donnée à tel ou tel; et l'on désigne également par ces mots la commission ou la charge elle-même: mais ces mots désignent plus ordinairement une pièce écrite appelée acte: ces différentes dénominations tirent leur origine des différens objets auxquels la commission se rapporte. Cet acte exprime l'objet de la commission, la personne qui la donne, et celle qui en est chargée.

‘ Mais souvent, et en général dans le commerce, on n'exige pas cette preuve, parcequ'on se fie à la bonne foi de celui qui s'annonce comme ayant commission.

‘ Il n'est pas extraordinaire, qu'en donnant commission, on charge le commissionnaire de quelques ordres, qui limitent ou étendent la faculté de l'exécuter de telle ou de telle manière; et que le commettant ne juge pas à propos de faire connoître à celui avec lequel son commissionnaire a ordre de traiter, la raison pour laquelle ces ordres ne sont pas exprimés dans le plein pouvoir. On nomme cela une commission secrète. Observez, et il est essentiel de le faire, que lorsque quelqu'un agit pour vous en votre nom, il agit comme vous représentant; mais qu'il ne le fait pas, lorsqu'il agit pour vous en son propre nom.’
Vol. ii. p. 220—222.

‘ Une société peut être formée de façon que chacun y participe au gain et à la perte suivant le capital qu'il y a fourni, et que celui qui y apporte d'ailleurs son travail jouisse encore de quelque bénéfice extraordinaire.

‘ La même chose peut avoir lieu dans une société à laquelle quelques-uns n'apportent que du travail, sous condition, de ne pas participer à la perte, de participer au profit pour une certaine partie, et de jouir d'un bénéfice extraordinaire.

‘ On connoit dans le commerce une société que l'on nomme *en commandite*. Dans ces sociétés il n'y a qu'un des associés qui paroît et qui gère. Suivant le droit de la France celui-là est le seul, qui soit solidairement obligé pour les prétensions sur la société; les autres ne le sont, que jusqu'à la concurrence de leur part; c'est-à-dire jusqu'à la concurrence du capital qu'ils ont mis en société.

‘ *M.* Cela me paroît très naturel. Car en mettant une certaine somme, il paroît, que je veux bien risquer de la perdre, mais non pas au-delà. En considérant une société comme une

personne morale, qui fait son commerce par un certain capital mis en commun par des associés, il semble, que ceux qui contractent avec elle doivent être considérés comme traitant avec elle sur ce pied, et lui donner crédit suivant son état : que par conséquent ils ne peuvent répéter des associés en particulier ce qu'ils ont à prétendre de la société, et qu'ils doivent se contenter de ce qu'elle possède et en cas d'insolvabilité de ce que la société possède.

'N'ayant point contracté avec un associé en son particulier, mais comme représentant de la société, il ne s'est pas non plus engagé envers moi en son particulier, et par conséquent je n'ai pu acquérir aucun droit sur lui en son particulier.

'L. Votre raisonnement, *Maurice*, est très-juste : dans ce cas il n'y a point d'obligation que celle qui résulte de la relation dans laquelle on vient de contracter.' Vol. iii. p. 128—129.

Our readers must be relieved from *business*, while we recur to more general observations. The objection, which our memory now recalls, was made by an English translator to the *original pages* of the learned baron Puffendorf: "they were not only loaded with numerous citations at large, but with disorderly marks of addition, reference, comparison, and the like; as if the confusion of a swelling margin had run over and discharged itself upon the text."

No similar blame can be attached to the volumes of Dr. Luzac: *their* margins are completely divested of *notes, citations* of authorities, and *every disorderly mark*: even an index is omitted. Celebrated writers on politics, commerce, and jurisprudence, have been, however, sedulously consulted, and have afforded ample contributions. The systems and opinions of Grotius, Puffendorf, Heiniculus, Leibnitz, Wolff, and Bynkerslock, have not been neglected. Although cursorily examined and often opposed, their valuable writings are usually treated with candour and respect; while J. J. Rousseau and Voltaire are loaded with this excess of moral indignation:—

'Ces deux génies ont *pestiféré* le genre humain, relativement à ses sentimens moraux.

'Leur plume a fait ce qui fit à Athènes la langue de Démosthène : elle a *ensorcelé* la plus grande partie de la multitude.'—

'Violà la source des abominations qui se commettent en plusieurs pays,'—'des dérèglemens affreux, des débauches exécrables, des obscénités dégoutantes, auxquelles on s'abandonne, &c.' Vol. i. p. 189—190.

The principles of Dr. Luzac are certainly pure; and in this compilation he has collected abundant moral, political, and commercial facts and reasonings. His style, plain and unattractive, we acknowledge proves that *he is no sorcerer*. Wri-

ters who conscientiously endeavour to promote public instruction, may, perhaps, justly appeal, as an apology for tediousness and inelegance, to the salutary and classical maxim :

‘Cavendum est, ne fugiant ex animo quæ dicenda sunt, dum attenditur, ut arte dicatur.’

ART. VII.—*Traité d'Economie Politique; ou simple Exposition de la Manière dont se forment, se distribuent, et se consomment les Richesses. Par Jean-Baptiste Say. Paris. 1803.*

Treatise on Political Economy; or a simple Explanation of the Manner in which Wealth is acquired, distributed, and amassed. 2 Vols. 8vo. Imported by De Boffe.

POLITICAL economy is scarcely a correct expression : *city house-lavv*, which is a fair translation, borders on verbal contradiction, the one epithet extending what the other limits : *public house-keeping*, an analogous combination, is hardly intelligible, unless when the two first words are compounded by a hyphen, and then it has a technical and wholly different meaning. Sir James Steuart seems to have felt the incongruity of this phrase, and in his title-page offers the substitution of *domestic policy*. The French writers, however, are fond of treating on political economy.—(Rousseau wrote concerning it in the *Encyclopædia*); and they mean by it the theory of administration, or, as the Germans call it, *cameral science*, from *camera*, the exchequer.—To *statistics* is assigned the industrious occupation of collecting facts; and to *political economy*, the amusive office of deducing the general rules of legislation, and the practical principles of universal application, from an analysis of those facts. In the preface to the *Physiokratie* of Dupont de Nemours, a neat account occurs of the leading French writers on political economy. It is become the fashionable study: he who is ambitious of the rank of prefect of department, writes an inaugural dissertation on political economy. This author is an avowed pupil of Adam Smith. He says, in the preface, p. vi.

‘The work of Smith is a confused assemblage of the soundest principles of *political economy*, supported by luminous examples; and of the most curious notions of *statistics*, mixed with instructive reflexions; but it is not a complete treatise of either: his book is a chaos of just ideas, hustled pell-mell with positive information.’

So severe a censor has little claim to indulgence.

It is, however, a very usual phenomenon, in the literary world, to deter the reader from consulting the source to which one is most indebted, and to invite his attention to ‘a thousand

and one' writers, who have lent nothing but their title-pages to the decoration of referential notes apparently erudite.

This work is divided into five books. The first treats of production; the second of money; the third of value; the fourth of revenue; and the fifth of consumption. But these are unequal distributions; for the first contains forty-seven, and the third only nine chapters.

From the ninth sub-division, which defends the utility of substituting machinery to human labour, we will translate a passage.

'As often as the difficulties are successfully surmounted, which accompany the introduction of new machinery, not only the general advantages result, which I have already indicated, but other particular advantages, to the very class which had originally been deprived of employment. The experience of all times offers proof of this assertion; but one of the most striking is furnished by the machinery which serves to multiply rapidly the copies of a given manuscript, I mean the printing-press.

'I shall not speak of the influence printing has had on the perfection of human knowledge and the civilisation of the globe—I only mean to consider it as a manufacture, and under its economic relations. When it was first introduced, a number of copyists were thrown out of employ; for a single printer does as much as two hundred copyists. It may at least be calculated that three compositors will set a sheet in a day, and that two pressmen will strike off a thousand copies. Here are, then, five days' labour spent in making a thousand copies. But a manuscript of this same sheet would employ a single copyist a whole day. It would thus require a thousand copyists, during one day, to accomplish what five printers accomplish in the same time—two hundred, to do the work of one. It follows, that, out of two hundred copyists, one hundred and ninety-nine were likely to become superfluous by the introduction of printing. Yet what has happened? The greater facility of reading printed than manuscript books, the low price to which books have fallen, the encouragement given to authors to compose a greater number, both for instruction and amusement, have occasioned a demand for a far greater number of printers than there were previously of copyists. Add to this the consequent increase of type-founders, paper-makers, bookbinders, and other connected trades; and it will probably appear that one hundred times as many persons are employed by this branch of business now, as found employment in it before the introduction of machinery.' p. 49.

This is a very striking illustration of the advantage of introducing machinery. It also deserves attention, that most ma-

machines supersede some ordinary and easy operation of human labour, which is performed by children, or by the ill-educated classes; which any one can do. Such sorts of labour are always ill paid. Machines, therefore, render a portion of the miserable and suffering class unnecessary; but they increase the demand for skilful labour and educated exertion; and thus favour the multiplication of the polished and enjoying classes of society.

In the nineteenth chapter, a comparison occurs of the French and English taste for the arts of industry, which may amuse our manufacturers.

‘The English, who succeed less than the French in the arts of taste, in architecture, in painting, or in sculpture, surpass, in general, the French in the choice of those forms, designs, and colours, which contribute to the pecuniary profit of the arts of industry. They possess better than the latter that knack in business which consists in applying the knowledge that circulates to the wants of life: they have not, in theoretic mechanics or in chemistry, a Laplace, a Prony, a Monge, or a Berthollet; but, in the application of science to practical use, to the arts of gain, the French do not equal them: they avoid alternately two rocks on which the latter are usually wrecked, routine and versatility.

‘Not only do they make an astonishing advantage of their very moderate progress in the arts of taste, but they give to every production of their manufactories the irresistible attraction of convenience. Their stuffs, their utensils, are not only agreeable in their forms, their designs, their colours, but they are sure to be those of which the wear and use is most agreeable. Elsewhere men are content if they give to a ewer or a tea-pot the form of an antique vase; but, in England, it must, moreover, be handy, pour glibly, and have an orifice large enough to be cleaned easily: a handle, with them, has no grace if it hurt the hand. Elsewhere very pretty gowns are made; but *they* manufacture such as people have occasion to wear. Elsewhere pretty works of industry are made, adapted for the rich, the great, and the curious; but the English make what is the general wear, what is within the compass of every body’s pocket, what is bought because it answers.’ P. 133.

The author then proceeds to translate, from the Monthly Magazine, an account of the cotton manufacture, which it would be useless to re-import. In general, the reflexions of our author, though very sound and very proper, have little novelty or importance: his illustrations are often fortunate; and he will assist in popularising a just way of thinking on many points of internal polity.

The French use the word *billon* (whence our *bullion*) for a mixed metal containing one fourth of silver and three fourths

of copper. The small change in France is made of this mixed metal. Our author recommends to the government to open shops for the conversion of such *billon* into gold and silver, at the pleasure of the holder (p. 509); because every species of circulating medium, he says, which is not convertible into gold and silver at the will of the holder, loses in efficient, if not in nominal, value: so that a dearth of all the petty articles paid for in *billon* is already a sensible grievance at Paris. He instances the permission given by law, at Paris, to deposit in copper one-fortieth of any given payment; the immediate consequence of which was an avowed advance of prices. He proves satisfactorily, that all attempts to value coined money, otherwise than at the market rate of metal weighed and assayed, is pernicious, especially in foreign intercourse.

In the second volume, one of the good chapters (p. 276) opposes the prejudices against usury, and ascribes, *à la Française*, to the Christian religion the prevailing hostility to an usurious system. Clearly is it expedient that the capitalist should be allowed to proportion his extortion to his risque. The competition of bankers would, in this case, increase; the number of enterprises would also increase; the number of bankruptcies would consequently increase: but the facilities to adventure, the augmented fixation of property, the progress of circulation, and the higher profits of lending, would more than indemnify society for the added proportion of unsuccessful venture.

Of the fourth book, the eighteenth chapter examines what is the most advantageous form of employing the capitals of a given society. We shall translate a passage.

‘ The employment of capital the most advantageous to the capitalist, is that which brings him in most profit: but this employment may not be the most advantageous to society; for capital has this property, not merely to have a revenue peculiar to itself, but to be a mean of procuring one from land, or from industry. This restricts the principle, that what is most profitable to the individual is most profitable to the community. A capital lent abroad may bring to the owner, and to his country, the largest obtainable interest; but it neither serves to augment the income from land nor from industry, which it would have done, if lent at home.

‘ The capital the most advantageously employed for a country, is that which puts in motion agricultural industry: it calls forth the productive power both of land and labour at home: it at once increases the profits both of soil and toil. A capital intelligently employed may fertilise rocks. In the Cevennes, we survey whole mountains, which were but naked rock, and which are now covered with a flourishing cultivation. The rock was split with gunpowder: with the fragments of stone have been built, at different heights, little walls, which prop and

detain a small quantity of soil, carried thither by human hands. And thus the back of a desert mountain has been transformed into steps of verdure.

‘The borders of the lake of Geneva, near Vevay, originally barren, have been cultivated in the same manner, and produce a valuable wine. The capitals vested in such improvements would probably have brought to the proprietor a greater profit in foreign commerce: but the total income of the canton would have been less increased by that form of investment.

‘The most productive employment, next to agriculture, is that of manufacture and internal commerce; because it puts an industry in motion whose profits centre in the country, while the capitals employed in foreign commerce put in motion, indiscriminately, the land and labour of any country. The least productive use of capital is that employed in the removal of commodities from one strange place to another.’ P. 329.

This doctrine, as indeed every other in the book, is a re-statement of Adam Smith’s opinions. We think it, however, liable to controversy; and that the employment of capital the most profitable to the individual is also most useful to the state, whether it consist in agricultural, manufactural, or commercial investment. If the capital vested in fertilising the rocks of Cevennes or Vevay, had been vested in the English funds, and the annual income laid out in the purchase of corn or wine, it would probably have supplied those parishes more abundantly with such articles, than they are now supplied from their terraces of corn-field and their stair-cases of vine-yard. In this case, all the labour is thrown away. Corn should be raised where it can be raised cheapest, whether in Sicily or North-America; it is no object to raise it at home. On the contrary, attention to agriculture usually brings on high rentals: and then monopoly-laws, to keep foreign corn out of the market, are enacted, which inflict a perpetual artificial dearth on agricultural countries, and oblige them, as in England, to pay far more for the productions of the earth, than if they were all to be fetched from the antipodes. Agriculture is naturally the latest stage in the progress of society. When a country is wholly cultivated, it has attained the acme of prosperity: but it is better to defer this acme, and to domesticate every other source of employment and profit, before the attempt be made to extort crops from barrenness, and usurp the commons of the cottager. Take six thousand pounds, employ four thousand in the purchase of lands, and two thousand in the buildings, instruments, stock, and capital necessary to render that land productive. What will it produce? Certainly not six hundred pounds a year. Yet it would have done so in any other sort of industry: but nature has rendered agriculture the least profita-

ble, in order that only the fertile lands might be selected for cultivation, and a greater distribution and dispersion of the human race be promoted.

We see no reason to wish for the translation of this work: it is a mere re-publication of the beauties of the *Wealth of Nations*. The book-market is at present very dull, and scarcely suffices to keep alive the enterprises which are essential to public instruction: care should be taken not to glut it by needless importations. Perhaps some draw-back of the duty on paper might be allowed on unsold books; as the capital risked in an edition is inconveniently vast, and operates to depreciate copy-right.

ART. VII.—*Nouveaux Mémoires Historiques sur la Guerre de Sept Ans. Par M. de Retzow, ancien Capitaine au Service de Prusse.* Paris.

New Historical Memoirs on the Seven Years' War. 2 Vols. 8vo.
Imported by De Boffe. 1803.

' HISTORY is of three kinds: it either represents some portion of time, some memorable person, or some distinguished action; and is, accordingly, termed chronicle, biography, or relation. Chronicles,' continues lord Bacon, 'excel in glory and name; biographies, in profit and use; relations, in sincerity and truth.' To the first and third of these positions we do not accede. Chronicles, by intercepting that sort of arrangement which is most favourable to the interest and participation of the reader, are little adapted to infuse partiality, and are therefore usually remarkable for sincerity and truth; whereas the relation of any illustrious action or event is commonly undertaken by an impassioned admirer either of the cause or of the characters involved: and as it requires something of the wholeness, cohesion, and arrangement, of the *epopœia*; so it commonly participates its character, and surrounds with peculiar lustre the incidents and personages introduced. Relations, therefore, excel in glory and name; but chronicles in sincerity and truth.

The history before us is rather a relation than a chronicle; and narrates the history of the seven years' war with the interest of a Prussian patriot, and the criticism of an accomplished officer. Perhaps, to the English reader, the account of the campaign terminated by the battle of Rosbach, will form one of the more interesting passages.

' Frederic professed to admire the heroes of antiquity, especially those who were distinguished for constancy under misfortune. The displeasure he felt at the idea of falling in the struggle he had undertaken, approached to despair, in a mind so

ambitious as his. As a poet, he naturally wished to embellish his verses with a selection of the noblest and most natural images. To which of these motives is to be ascribed the declaration, in his rhymed epistle, of a resolution not to survive an untoward event, is incapable of decision. Both might influence him; nor is it astonishing that a voluntary death should appear to him rather laudable than blame-worthy. Still, his literary occupations, which he cultivated amid the clangor of arms, contributed to soften his chagrin. His mind, sharpened by application, estimated with much discernment the dangers of his position, and the means of improving it. Study inspired that calmness with which he marched to meet event. He had always self-command enough to disguise his apprehensions from those who approached him, and to affect serenity, and even gaiety, in moments when his soul was a prey to the most devouring agitation. His soldiers, his generals, his most intimate friends, were never suffered to perceive the apprehensions which lurked in his heart for the fate of his undertakings. He possessed the art of feeding the hopes and stimulating the ambition of his soldiers and officers, even in the most desperate situations. The confidence he inspired was so great, that, from the moment he headed the battalions, every one braved the most imminent dangers. He never crouched to his allies, even when he most wanted their assistance. Such was the respect he inspired, that, after the convention of Closter-seven, when he made it a topic of reproach to the king of England, he haughtily charged him not to commit a *baseness* in forsaking him; and the English ministry, trusting to some happy reverse of fortune, sought pretences to defer the ratification of that dishonourable convention.

‘In so critical a juncture, the king drew up a new plan of operations. He was persuaded the Austrians would make no progress in Silesia before they had obtained a fortified town in that province. He expected that the siege of Schweidnitz, by which they were likely to begin their operations, would employ them for some time. An army moderately numerous, and entrenched in advantageous positions, appeared to him sufficient to keep his foes from advancing, until he had delivered Saxony and the duchy of Magdeburg from the danger which threatened them. He resolved, therefore, to act with vigour, especially against the French and the troops of the Empire. He left, near Görlitz, the duke of Bevern, with an army of fifty-six thousand men, to observe the great Austrian army. He himself left Bernstedel, at the head of a troop of twelve thousand men, and directed his march with the greatest celerity towards Dresden. Prince Maurice, who commanded ten thousand men, joined him there. With this little army he gained the borders of the Saale, by Döbeln, Grimma, and Pegan. He passed the

Saale near Rösen; drove before him some parties detached by Laudon, who infested the country; advanced, through Naumburg and Weimar, to Erfurt; and got Gotha occupied by a detachment of cavalry, which general Seydlitz commanded. At his approach, the enemies retired on all sides, and took post near Eisenach. The king, having no magazines in the country, thought it improper to continue pursuing his enemies there, as he must have distanced himself too much from Saxony and the banks of the Elbe: Frederic, therefore, contented himself with proving to the enemy the possibility of his coming up with them, even from Lusatia; and only thought of providing for the security of his own states. He sent the duke Ferdinand of Brunswick, with four thousand men, into the principality of Halberstadt, to withdraw it from the yoke of the French. Prince Maurice was detached into Saxony, at the head of eight thousand men, to observe the movements of the Austrians between the Mulda and the Elbe. Reserving only a body of ten thousand men, he boldly remained near Erfurt, to await the further operations of the combined army.

‘Frederic was not long kept in suspense. Scarcely was Soubise informed of the departure of the Prussian detachments, than his courage revived, and he hoped to signalise himself by some brilliant exploit against the little army opposed to him. His first operations were directed towards Gotha; here was fought the famous battle, of which M. Archenholtz has given so picturesque a description, and which reflected so much credit on the Prussian general Seydlitz, and so much discredit on the French general.

‘Seydlitz showed, for the first time, on this occasion, his great capacity for the art of war. There was almost a rashness in attempting to surprise, with fifteen hundred horse, a city defended by artillery and by infantry. Yet this expedition proves that audacity is often crowned with success, when it is not blind, and when the warrior, who resigns himself to it, knows how to take advantage of circumstances and opportunities. Seydlitz seemed born for the trade of partisan, or general. He had served alternately in all the different corps of cavalry, and well knew the best use to be made of every troop of horse-soldiery. He was, personally, very brave. Naturally and intellectually sharp-sighted, he chose with admirable discernment, and executed with celerity, the tactics most adapted to his situation. These qualities distinguished him from all other generals. He also knew how to win the love of his inferiors, by his affability, by his dislike to occasion trouble, and by his eagerness to recognise and to reward merit. He has immortalised his name in more than one rencontre, but especially in the battles of Rosbach and Zorndorf. His death deprived Prussia of one of the greatest captains of the age. Although he formed

many excellent officers, the glory of the master will retain the upper hand; in as much as genius, the gift of nature, is superior to labour and art.

'After the affair of Gotha, the king did not stop long in the environs of Erfurt, but retired behind Buttstadt, while the combined army dared not descend the mountains near Eisenach: however, it again occupied the town of Gotha. Meanwhile the duke Ferdinand of Brunswick had driven the French from Halberstadt; but Richelieu advancing at the head of thirty thousand men, the duke was obliged to retire to Wansleben, and to re-approach Magdeburg. The province of which this town is the capital, was now in danger, and the fortress seemed threatened with a siege. The duke Ferdinand had not strength enough to defend at once both the province and the fortress, if the enemy had pushed his operations vigorously; but, contrary to all expectation, he was not attacked in his post at Wansleben, although it only depended on Richelieu to confine him within Magdeburg, and to lay the province under contribution. As the avidity of Richelieu was notorious, and he seemed to think only of enriching himself at the expense of the enemy, no one could guess the motive of his missing so apt an opportunity of gratification. Some persons have presumed that duke Ferdinand privately employed efficacious motives to induce Richelieu to remain inactive. What renders this conjecture probable, is, that, in critical moments, the king never neglected any sort of measure by which the state could be served; and the previous conduct of Richelieu made it probable that he was open to corruption. I add, that general Retzow, my late relative, assured me, that colonel Balby was the person employed in disguise to bring about a secret negotiation; and that Richelieu, through him, offered not to attack the states of the king of Prussia that campaign, if he was paid a hundred thousand dollars, and allowed to sell, as he could, protections in all the exposed provinces.

'By means of this accommodation, the king had provided, in some measure, for the safety of his provinces on the borders of the Elbe; but Saxony was not the less exposed to the danger of invasion. Richelieu had lately re-inforced the French army combined with that of the Empire, by sending thither a detachment of his best troops. It was approaching the Saale, just as the king was obliged to fly to Forgan in order to try to cut off the retreat of the Austrian general Haddik, who, by a bold push, had approached Berlin. But Haddik escaped the king, with the contributions he had levied on that metropolis, and the gloves* he took there for the empress.

'When the king quitted Thuringen, to go and punish Haddik

* * The loyal spite of the glover sent in two dozen exquisite gloves, neatly papered up, but all for the left hand.'

for his enterprise, he left field-marshal Keith on the banks of the Saale, entrusting to him the defence of Saxony. But the king, having only ten thousand men at his own disposal, could spare but half of them to Keith. This small body was insufficient to keep the field, and defend the banks of the Saale: Keith divided it, therefore, into three parts: he destined two of them for occupying Merseburg and Weissenfels, and went to Leipzig at the head of the third.

‘Soubise and Hildburgshausen took advantage of the king’s absence to quit their retreat near Eisenach. The importance of Haddik’s expedition had been much exaggerated. It was hoped that the Swedes would agree to attack, in an opposite quarter, the estates of the king of Prussia, and that the monarch would thus be placed in the most embarrassing situation. Such were, indubitably, the motives which induced Soubise and Hildburgshausen to undertake at length the deliverance of Saxony, although it was late in the season. The army of the Empire marched to Weissenfels, the French army to Merseburg. General Retzow, who commanded at Weissenfels, was informed, by a spy, that eight thousand men would attack him the next day, and that for this purpose the defile had been occupied near Rippach, on the Leipzig road. He went out, therefore, secretly, from the town, with the detachment under his orders; took a circuitous course along the Saale; and, happily, joined field-marshal Keith, who had recalled the garrison from Merseburg to re-inforce his army. The prince of Hildburgshausen approached Leipzig, and summoned the garrison to surrender at discretion. Soubise, on the other hand, passed the Saale.

‘Leipzig is not tenable against a serious attack: but the honour of the Prussian arms required a refusal of capitulation, and the expression of a disposition to bury themselves under the ruins of the town, rather than surrender. Keith knew very well, that, by giving this answer, he was observing the usage of war. He was uncertain whether the king would find means to send him timely assistance: he endeavoured, therefore, by stratagem, to secure time for information. He knew how much value the merchants of Leipzig set on the villas and gardens they have embellished at so much expense in the suburbs. He sent for the magistrates. “Gentlemen,” said he, with truly British haughtiness, “the prince of Hildburgshausen has summoned me to surrender at discretion. Rather than dishonour myself by such a baseness, I will sacrifice the last of my soldiers and myself; even if it cost the subversion of the city. I have to inform you, therefore, that, on the first movement of the enemy to attack me, I shall set fire to the suburbs. I am sorry that my situation should render a proceeding necessary which I lament with all my heart.” Terri-

fied by this threat, the magistrates sent deputies to the enemy's camp, who, by solicitations and presents, induced Hildburgshausen to remain inactive. This gave Frederic time to advance to Leipzig after his expedition into Lower Lusatia.

“The king did not expect, that an army, which had hitherto shown so little energy, would have had the courage to attempt conquests at the end of October. He also supposed that Keith, in his dispatches, had exaggerated the danger of his situation. On his return to Leipzig, the king asked him, ironically, “Well, has Hildburgshausen swallowed you up yet?” “No, sire,” answered the Scotchman, coolly; “but he was near doing it, had I not taken a strong measure.” Frederic afterwards inquired into the minutest particulars of what had passed; and, when he learned that the advanced posts of the enemy were in reality very near the town, he had them driven off the same day. The adverse army then decided to pass the Saale. The French went to encamp near Merseburg; the troops of the empire near Weissenfels; and placed strong garrisons in both these towns, and in that of Halle.

“This position announced, on the part of the enemies, the design of keeping possession of the banks of the Saale. The king could not but oppose their taking winter quarters so near the frontiers of Saxony. Although the state of affairs in Silesia rendered his presence there absolutely necessary, he thought he ought to force Hildburgshausen and Soubise to retire into the interior of Thuringen, in order to remain master of advancing, without risque, to the aid of the duke of Bevern, who was incurring a very perilous situation. He therefore quitted Leipzig, ordered prince Maurice and duke Ferdinand to re-join him, and collected his army near Altranstadt. It amounted to but twenty thousand men; at the head of whom he advanced against an army three times more numerous than his own. He marched himself, with the van-guard, to Weissenfels, and penetrated into the city. The imperial troops there took flight; and he made prisoners of such as had not time to reach the bridge over the Saale, which had been too hastily set on fire. This beautiful monument of architecture, built on the plan of the covered bridge of Forgan, was entirely reduced to ashes; as the retreating garrison carried upon it tar-barrels, straw, and all the candles they could collect in the city: so that in five minutes the whole was in a stupendous blaze. This circumstance induced the king to direct the column commanded by Keith to march toward Merseburg. There, too, he found the bridge broken down, and fourteen battalions ready to defend the passage of the Saale, under the orders of the duke of Broglie. The bridge at Halle, too, had been interrupted; and, as the king was resolved to pass at one of these three points, he detached a body of men to Halle, to repair the bridge at this

place, whilst he superintended the construction of a new one at Weissenfels. The enemy then determined to quit the banks of the river, and to collect, in one camp, behind the brook of Micheln. Immediately the Prussian army passed the Saale in three different detachments, which re-joined at Braunsdorf.

'The day was on the decline when it reached the neighbourhood of the enemy. The king went instantly to reconnoitre, and found his right wing within reach. He determined on an attack, and the next morning mounted the heights of Schortau; when he perceived the enemy had shifted his position, had taken a more advantageous one, and had thrown up intrenchments in front. The attack no longer appeared to him capable of execution; he therefore retired, into an advantageously situated and well fortified camp, between Bedra and Rosbach. The French troubled his march by an ineffectual cannonade.

'Frederic, seeing there was no longer any means of forcing, with advantage, the enemies to a decisive battle, resolved to retire into Silesia. He hoped that Saxony would be safe from further incursions; flattering himself, that, on the approach of winter, the effeminacy of the French would be more solicitous about winter quarters than new expeditions. Apparently, such was their intention: and they must have attributed to the king a greater force than he possessed, or they would more perseveringly have disputed the passage of the Saale. On no other grounds can the negligence and carelessness be excused with which they acted, in not even attempting to attack and beat off the Prussian columns with a superior force. It was only after detecting the smallness of the Prussian army that they resumed a more formidable attitude, hoping, with their triple force, to surround and annihilate it.

'Fearing to miss their blow, if they were too hasty in executing the design they had just formed with so much precipitation, Saint-Germain remained, with six thousand men, opposite the camp of Rosbach, to cut off the communication of the Prussians with Merseburg, supposing that in their retreat they would take that direction. The rest of the army marched to the right, to turn through Buttstadt the left wing of the king, to fall on his rear, and thus to shut him out of the road to Weissenfels. Thus they expected to hem in the petty army of the king. The success of this operation appeared to them so infallible, that at Paris the approaching captivity of Frederic was already announced—a gasconade in the spirit of French levity. But the very security of the generals of the combined army made them commit blunders which brought on disastrous consequences.

'Already the king of Prussia was occupied with preparations for his retreat through Merseburg; already the order was given to evacuate the camp during the night; when intelligence

reached him of the movements observable in the adverse camp. However positive the accounts, he did not appear to pay any attention to them. The centinels having confirmed, at noon, the preceding observations, he quietly went to dinner. The generals, who were invited, could not fathom the extraordinary indifference of Frederic. The vigilant Seydlitz sent orders to his cavalry to saddle their horses; and the soldier, who already perceived the march of the approaching French, quitted his dinner to prepare for battle. I do not think I am mistaken in attributing to the following causes the extreme apathy affected by the king on this occasion.

‘In the position in which he was placed, he could only accomplish a retreat by way of Merseburg. But, easy as it might have been to execute it by night, it was very dangerous to attempt it by day, under the eyes of an enemy advancing in such force. Saint-Germain would only have had to turn to the left, to cut off, from the Prussians, all access to the Saale. Apparently, it was for want of any other chance of safety that the king affected this great tranquillity, in order not to disconcert his little army by any appearance of hasty measures. Full of confidence in the discipline of his troops, he probably projected to employ, on this occasion, one of his favourite manœuvres, which consisted in attacking an enemy in full march, in order to profit by his surprise, and force him to turn.

‘Bold as this resolution was, it was very successfully executed. Scarcely had the foremost columns of the enemy reached Buttstadt, than Frederic suddenly awoke from his apparent lethargy. The coolness he had hitherto expressed, suddenly gave place to that energy of the great man which is equal to vigorous measures at the right moment. In less than half an hour the camp was struck, and the army in motion, to anticipate the enemy and to attack him before his line could be formed. The king owed his victory to this manœuvre, which was executed with as much order as celerity. The enemy's columns, of which the foremost consisted of cavalry, were approaching in the profoundest security: in so much, that it was said, at the time, Soubise did not mean to attack that day, but only to spread his nets closer about the Prussians. A chain of little hills concealed from him the operations of the king. His cavalry was thus unprepared to resist the shock of the Prussians. It produced no less effect than a battery erected on the Ianshugel, a high hill in the neighbourhood, which ploughed up the columns of infantry, which were marching within three hundred paces of one another. The disorder occasioned was so great, that it was impossible for the generals to form. They endeavoured, indeed, to take post between Tagewerben and the wood near Obschutz; but the troops of the empire took flight; and the confusion became general, when prince Henry advanced, at the head of six

battalions, and attacked the right wing of the French infantry, while Seydlitz fell on its rear with his cavalry. Soubise made, however, a last attempt to re-establish order, by commanding the cavalry of his left wing to advance with his reserve; but it appeared less to act than to announce the complete defeat of his army: some well-directed discharges of artillery were sufficient to make it fly from the field of battle as quickly as it had appeared there. Saint-Germain covered, like a man of resolution, the retreat of this totally-defeated army.

‘Such was the issue of this memorable battle, that scarcely any other can be compared with it. The wonderful celerity with which the French army was surprised, occasioned its flight, augmented its disorder, and filled the remnant with the terror of the Prussian name. When the king passed, the next day, the river of Unstrut, and pursued the enemy to the mountain of Eckartsberg, the rear-guard of the French fired cannon in the air, and their army continued its retreat to the interior of Germany with incredible rapidity. There is, in this, something characteristic of the French: their courage is soon inflamed, and soon extinguished: they advance with confidence against the foe; but if an unforeseen check intervene, they as speedily sink into despair. The French must have successes, to undertake new victories.’ P. 240.

From this passage our readers will infer, that M. Retzow, though an accurate, is a garrulous historian, and narrates the incidents of the seven years’ war with all the details of patriotism, and many of the amplifications of old age. An epitome of the work, enlivened by the occasional consultation of the analagous history of Archenholtz, in a single octavo volume, would be an agreeable addition to the historical library of the English. M. Retzow thus sums up, in his concluding paragraph, the character of his hero.—

‘What a contrast, between the situation of Frederic in 1756, when his enemies were conspiring his loss, and the fine moment in which he returns a conqueror to his metropolis! He eclipses all his formidable adversaries: he erects for himself monuments which excite the admiration of posterity, and which the descendants of his happy subjects will bless for ever. Ages will roll away before a monarch offers, to astonished Europe, a second example of the union of all the qualities which form the great man and the accomplished sovereign. Frederic was not exempt from the weaknesses incident to human nature: but he united, with the wisdom of Marcus Aurelius, the fortune of Alexander; and posterity will ratify the surname bestowed by his contemporaries, of Frederic the Only—*Friederich der Einzige—Frederic l’Unique.*’ Vol. ii. p. 555.

ART. IX.—*Les Voyageurs de Suisse, &c.*

The Swiss Tourists. By E. F. Lantier, *Author of the Travels of Antenor, &c.* 3 Vols. 8vo. Paris.

THE travels of Anacharsis have had few imitators; since the task was not easy to give such a complete view of the state of any country—of its institutions, literature, and politics—as to carry on the deception that we are reading the real narrative of an occasional visitor. M. Lantier, in his travels of Antenor, was not very successful. Switzerland is better known; and his descriptions are consequently more accurate in this work, more natural, and more interesting.

We need scarcely observe, that the narrative of the adventures of the travelers is little more than the connective thread of numerous descriptions of different parts of that delightful but unfortunate country—(Mantua, vœ! miseræ nimium vicina Cremonæ!)—a bond of union to literary disquisitions, conversations, and criticisms. With these we have been sometimes amused; we have been occasionally instructed. But the author's deity is Voltaire, and he is not an idol whom we worship. M. Lantier's admiration of him often exceeds all bounds, and we have more than once laid down the volume in disgust.—But, to be more particular. The work is introduced with a lively, yet sarcastic, address to Criticism: it is in Voltaire's best manner, and very amusing. The spirit would evaporate in prose, and we have not leisure at present to offer it in any other form: we shall select, however, a happy image, which will not lose all its zest by what Mr. Bayes denominates *transposing*.

'To succeed, goddess, in thy cultivation, and to reap a successful harvest, thy censure, like the yet-doubtful dawn of day, must enlighten, without wounding the eyes. Thou must borrow the language of Equity and Mildness; and, in devouring the work, caress the author with a smile: like the lovely bee, in collecting honey among the flowers, who uses his sting only to punish transgressors.'

The work opens with the elopement of Blanche with Adolphus Dehnont. They had been contracted, with the consent of a virtuous and amiable mother now no more in existence, and, in the first instance, with the approbation of M. Bertand, the father. After the mother's death, the father forms a connexion with a beautiful woman lately settled in that country, whose brother, equally unknown, and of a suspicious character, is introduced to Blanche. M. Bertand, now fascinated by his new love, forbids the union of Adolphus and his daughter, in order that this brother may possess her hand. Every species of outrage and ill-usage contribute to distress the fair Blanche; and she

has, at last, reason to dread an attack on her virtue: she consequently escapes with Adolphus to Switzerland. They here live for a time happily, and are married with the consent of the aunt of the young lady: but the fortune of Delmont, entrusted to his brother, whose speculations fail, is totally lost; and the persecuted pair are obliged to adopt a more frugal mode of life, in a more retired spot. The diseases of Bertand, even with the urgent remonstrances of his confessor, do not point out, in their proper light, the mis-conduct of his new wife: but the discovery of a transaction, in which she is closely implicated, by a servant, at length points out his delusion; and he is reconciled to his daughter and her husband.

As usual in French works, the morality is not pure. The reprehensible steps of lady Ellis are not properly exposed; and neither the conduct of the aunt, nor of the domestic who discovers the infamy of madame Bertand, are destitute of blame. The literary opinions are not wholly *à notre goût*; but this we do not mean to regard as a fault. Voltaire, we have said, is too highly commended; and Rousseau is depressed below his level. We shall select some specimens of different kinds.

‘The Supper with Voltaire,’ was a promising title; but it contains little, except well known anecdotes not very advantageously detailed. We were more pleased with the following notice of the literati and men of wit whom madame St. Omer, the aunt and warm friend of Blanche, saw at Paris.

‘An Italian, full of genius, said to me one day—“In a certain country, men meet to talk; and that is called society: sheep assemble to look at each other; and this is called a flock. You have societies in France; but in Italy we have only flocks.” I replied,—In France we have poets and philosophers; in Italy you have sonneteers and capuchins. But let us turn to the philosophers whom I have promised you. Open your eyes, and you shall see what you have not yet seen.

‘First, behold the abbé Raynal; with whom I breakfasted, in the English manner, on tea and toast—a breakfast that I like as little as his kisses. The good abbé teased the men with his loquacity, and with his kisses the women. He forgot, that, in conversation, every one wishes to speak in his turn; and that a prattler is a poacher, who hunts on another’s grounds. His conversation, which might have united entertainment with instruction, was sharp and unpleasant. This fault appeared much more astonishing in a man of genius, as great talkers are in general equally void of ideas and things. “It is good to speak, and better to be silent,” says the sagacious La Fontaine.’

We may, perhaps, be allowed to add, that the abbé Raynal’s work, with all its merit, is to be stigmatised as the first of the philosophic publications which contributed to madden man-

kind, beyond the reach of the whole island of Anticyra. It has been said, and we have reason to believe with truth, that he was the author of a very small part of the History of the Indies. We know that he felt great indignation that the work was not translated entire in England. The judgement, or the prudence, of the translator, showed the impropriety of many parts, which the abbé himself lived to lament.

‘Diderot, in conversation, was always moving his knees. He scarcely hears you : he catches one of your ideas, and his ardent imagination raises a system on the foundation. He speaks with rapidity and violence, and the turn of his language is often poignant and original. He spares neither exclamations nor apostrophes. He neither loves priests nor kings. Without the former, said I to him one day, how would you manage the people ? with philosophy ? “Why not ?” Try it first at home, in your own family ; on your wife, your children, your domestics, your workmen ; and inform me of your success. He raised his head, fixed his eyes on me, shook his knees, and made no answer. I saw his imagination was building a system of government in the manner of Plato. When I knew him, he laboured under a very distressing disease ; and I said, Take care of yourself ; your disorder may have consequences. “What consequences ?” A sudden death. “May the Almighty hear you ! I think the most sudden death the best.”—He was gratified.

‘Mably is morose, dry, and sharp in discussion. He was an Heraclitus, whom I never loved, and who loved nobody. When dining together, we had a little dispute : He regretted, with his usual moroseness, the Greek and Roman republics ; those times when strong, elevated, and courageous minds, were capable of great actions and heroic virtues. I told him, that I neither loved the Romans, nor their exalted virtues. “I believe so, madam : these Romans were not so gallant as your adorers.” Piqued with this answer of the hypochondriac, I exclaimed, Abbé, I have not read your works : they are too tedious and too learned for me ; but I have read a little history. If your wife or daughter had been one of the ravished Sabines, what would you have thought of this republican excess ? Had your brothers or yourself been prisoners of war at Rome, how would you have liked a walk to the Capitol, and the slavery that followed ? You quote, emphatically, the heroic features of the Romans ;—modern history furnishes equally brilliant ones ; but disdained by our philosophers, because they belong neither to Greece nor Rome. The abbé only answered, “That pretty women did not like the ancients :” and this poor witticism terminated the dispute.’

The country has been often described, in different forms. As

a specimen, therefore, of M. Lahtier's descriptive talents, we shall select his account of the inhabitants of Lausanne, from the sixtieth letter in the second volume. It also contains some curious anecdotes of Gibbon. We will give it entire.

' Lausanne is the asylum of peace and repose. Society is more agreeable here than at Geneva, where poor political disputes sour the temper. The Lausannois are engaged only in pleasure; so that enjoyment is an indigenous plant in this place. They laugh, and are happy;—an excellent lesson for those pretended Lycurguses who raise storms in the name of liberty and democracy, and wish to lay the foundation of happiness on destruction and ruin. Men accustomed to a tranquil easy life, prefer their enjoyments and repose to the illusions of an ideal liberty. Montaigne has observed:—"These violent contests respecting the best form of society, the rules best adapted for its connexion, are only fit to exercise genius." He quotes, to this purpose, Pibrac; who tells us, 'in whatever form of society we live, that we should love it, since it is from God.'—"Thus spoke," adds he, "the good Pibrac, whom we have just lost, who had so mild a genius, such just opinions, and such gentle manners."

' The women of Lausanne are beautiful, and have that shade of coquetry which renders them amiable without injuring their manners: but what lessens their attractions is the love of play, which has succeeded their love of genius. You know that the amiable Pandora cannot hold her cards without being tormented with soporific vapours. When I point out the necessity of exerting herself for the amusement of others, she tells me, that she can no more love play, than Jean-Jacques (Rousseau) can love visits, or myself sermons.

' Affectation is the original sin of the Lausannois: they affect luxury, nobility, genius; they are ambitious of rising, and elevating their existence, in the eyes of others. The nobility will feed on pride, and starve themselves, rather than grow rich by commerce; but their gaiety and vivacity atone for these little imperfections.

' We have formed an acquaintance with a learned man, a true philosopher; for he has quitted the splendid city of London, where he was respected, courted, and had pretensions to the first offices, to enjoy at Lausanne a pure air and philosophic repose. This learned man is Gibbon, author of the *Decline and Fall of the Roman Empire*; a charming work, of which the first historians of Europe, Hume and Robertson, speak with great commendation. He has dined with us, and we have returned his visit. He is much pleased with Blanche: he thinks that her figure corresponds with her mind, and that each breathes the gaiety and charms of the Graces: he visits her

almost every day: he has a happy memory; and his conversation is instructive and amusing.

Gibbon lived a long time at Paris; was acquainted with d'Alembert and Diderot, mesdames Geoffrin and du Bocage. He was much pleased with the society of this country, and was introduced to count Caylus, but could see him very seldom. "I attribute this," says he, "to his manner of life. He was distinguished for extreme simplicity and benevolence. He rose early; and his day was employed in examining the shops of the workmen. At six he returned, put on his night-gown, and shut himself up in his closet." With respect to Diderot, he told us a pleasant anecdote. "I was," says he, "in a small box, in the second row, at the French comedy, when Mahomet was acted. I saw Diderot in a box at a little distance. We bowed. At the beginning of the piece, I saw that he closed his ears with his fingers, without, however, looking from the actors, on whom he fixed his eyes with great attention. In the interval of the acts, he quitted this position, and resumed it on the appearance of the players; and this conduct he persisted in during the performance. I pointed out this singularity to the ladies with whom I was in company, who laughed heartily; but we could not guess at the cause of this singular mode of *hearing* a tragedy: yet, as Diderot was no fool, I supposed that he had better motives for his conduct than appeared to us. The next morning I eagerly sought him, to request the explanation. 'Did not your ladies,' says he, 'laugh at my expense, and suppose me a little cracked? They would have thought so with more reason, if they had seen me weep at the pathetic passages while my ears were closed: those near me, who had looked at me with surprise, when they saw my tears thought me mad. One of them could not help questioning me. I coolly answered, that every one had his own mode of hearing. What amused me most was the simplicity of some imitators, who were surprised at not being able to hear when their ears were closed.' For my own part, say I, if I had not known the sage Diderot, I should have thought he had just escaped from the mad-house; but your conduct is not less enigmatical to me. 'I will explain it. To judge with accuracy of the pronunciation of the actors, you must hear the discourse without seeing the person; and I thought, that, to judge of the gesture and the action, we must look at the actor, without hearing the play. I have often frequented plays, and know the greater part of our best pieces. For this reason, I experienced so great emotion at the pathetic speeches, when the gesture and the action answered to the words. I have found, however, by my experiment, that there are few actors who can bear this trial; and, were I to write my remarks, they would be greatly humbled. As a foundation for my experiment, I will tell you, that the author of *Gil Blas*

and Tuscaret, the celebrated Le Sage, was so deaf, in his old age, that it was necessary to put the trumpet to his ear, and bawl with the utmost violence; yet he went to plays, and lost not a single word. He even said that he could not so accurately judge of comedies, and the performance of the actors, as since he no longer heard them; and I am certain, from my own experience, that he spoke the truth." *

' Gibbon is fond of, and praises very warmly, the gentleness, the liberty, and the ease, which prevail in the circles of Paris; a pleasure unknown to antiquity, and with which modern nations are yet unacquainted †:—"a happy effect," he adds, "of the light amiable character of the French. At London, the houses are with difficulty opened, connexions are formed slowly; at Paris, they think they give you pleasure by receiving you, and are themselves pleased. At London I have less society than with you."

' This English philosopher, about fifty years of age, is of an immense bulk. Nature, either indulgent or treacherous, has given him an amazing appetite: he dines and sups regularly, and after each repast drinks a large dish of coffee. I scarcely flatter myself that he will attain a great age.

' We one day asked him if he had never wished for a companion to do the honours of his house. "Since my residence here," says he, "I have lived much in the society of women, and I have seen half a dozen women with whom I have been half in love, for different reasons. I should love one of them as a mistress, another as an agreeable acquaintance: I would willingly attach myself to a third, as a friend, on account of her good-nature; to a fourth, as fitted to preside with grace and dignity at the head of the table and family; to a fifth, as an economist and housekeeper; and to a sixth, as an excellent nurse. When I find all these qualities united, I shall offer myself as a husband, and be justly treated by a refusal." Without the quality of a good nurse, said I, I would offer you madame Delmont. "And I would gladly accept her," replies he, "without that quality." I perceive, added I, that you think very nearly with Fontaine: 'I have seen many marriages without being tempted.'

' His mode is to work in the morning, and to give the evening to society. It would be difficult to believe, if his veracity were not unquestionable, that he had sent five volumes, 4to, to the press from the first manuscripts, without copying, or having

* We remember having been at a play with one of Mr. Braidwood's scholars, born deaf, and consequently, till under his care, dumb. He understood every word, and distinguished accurately when the actor spoke with propriety.

† The author, in this passage, shows the greatest ignorance of the manners of ancient nations.

showed them to a single individual *. "Thus," says he, "my faults and my merits are exclusively my own." You do not, say I, imitate Pliny and Tacitus, who consulted their friends incessantly, and received advice.

'He loves games of chance and the pleasures of good company. "I ask only from society," says he, "attention and politeness---I seek for knowledge in my books. My friends in London warmly opposed my plan of transporting my books and my household gods to Lausanne, assuring me that I should be much disappointed in my hopes of repose and happiness: but the design was as much in my heart as in my head; and I have not been deceived. My knowledge of the world served only to convince me, that a capital, a multitude, could contain less true society than the small circle of a pleasing retreat;---a year hastily passed away, after my arrival, without regretting my emigration. My present life, without wanting ornaments, shines by its real light. My library commands, through three beautiful windows, an unlimited view of vineyards, fields, mountains, and lakes. A good table and a charming garden are not ingredients to be despised in this lower world. I think like Pompeius Atticus, whom I will not quote in Latin, who, notwithstanding his riches, was the greatest economist in superfluities, in buildings, but who still was careful to have a comfortable house, and to adorn it with whatever was agreeable and useful. With respect to the essential point, friendship, I have a friend, with whom I have been closely connected twenty-eight years (M. Yverdun of Lausanne). I do not think that every moment of a domestic life, even between married people who tenderly love each other, has the sweetness of the honey-moon; but both should learn to assist one another, and mutually to pardon their respective caprices and faults. This is, perhaps, a most difficult lesson."

'Adieu! my dear aunt. You will excuse me, if I leave you for Blanche. But, in effect, I have said every thing.'

This extract has detained us so long, that we have room only for a short anecdote, descriptive of the simplicity and integrity of the Swiss mountaineers.

'Here is an anecdote, as singular as it is interesting, which happened in this canton during the first years of liberty.--A peasant, named Frantz, came one evening to look for Gaspard,

* For this reason, it is said, that his reputation has been lessened in England; that his style, on the whole, is not approved of.

'It is said that Retif of Brittany, a fruitful author, being a compositor at a printing-house, published many works that he had not written:---he printed as he composed.' It is said, also, that Sir John Hill published more than he had read, not having read his extracts.--REV.

who was mowing a meadow, and said, "My friend, this is hay-harvest. Thou knowest that we have a dispute about this meadow: we know not to whom it properly belongs. To decide the question, I have collected the judges at Schwitz;—come then, to-morrow, with me, before them."—"Thou seest, Frantz, that I have mowed the meadow, and must make the hay to-morrow—I cannot be absent"—"And I cannot send away the judges, who have fixed on the day: indeed, we should have known to whom it belonged before it had been mown." They had some little controversy on the subject; and, at last, Gaspard said, "I will tell thee what thou shalt do:—Go to-morrow to Schwitz—give the judges my reasons and thine—and I shall save the trouble of going myself." On this agreement, Frantz went to plead for and against himself, and drew out the reasons on both sides as well as he could. When the judges had decided, he went to Gaspard—"The meadow is thine—the sentence is in thy favour; and I wish thee joy!" Frantz and Gaspard continued friends.—People the earth with such men, and happiness will dwell there.'

The notes are historic and explanatory; and the whole work is peculiarly interesting and entertaining. There can be little doubt of its being soon within the reach of the English reader. It well deserves this distinction.

ART. X.—*Voyage au Senegal; ou Mémoires Historique, Philosophique, &c.*

A Voyage to Senegal; or Historic, Philosophic, and Political Memoirs on the Discoveries, Establishments, and Commerce of Europeans in the Indies of the Atlantic Ocean, from Cape Blanc to the River of Sierra Leone inclusive: followed by a Narrative of a Voyage, by Land, from the Island of St. Louis to Galam; with the Arabic Text of three Treaties of Commerce concluded by the Author with the Princes of the Country: with Plates, and an Atlas. By J. B. T. Durand. 2 vols. 8vo. Paris.

VARIOUS are the views with which this unknown quarter of the globe is visited. We are not now recording the adventures of discoverers; the hair-breadth 'scapes, or the fury of war; but the more harmless, though not wholly innocent, contests of merchants. It is not, indeed, a very pleasing employment; but it is necessary, in a comprehensive journal, that the view of subjects, if not full, should be impartial and satisfactory; that a complainant should not be heard without also attending to the reply. The advantages of the African commerce have been the source of some disputes in France; and the arguments

are equally applicable to every other country; but, as Mr. Golbery's fragments have appeared in the English language, a short account of M. Durand's sentiments is necessary in this place, particularly as their merit may not be sufficient to excite the exertions of a translator.

As a traveler, our present author cannot enter into any competition with Mr. Golbery. The latter, with an express commission from government, examined every place of which he speaks, with all the necessary previous qualifications, and with great attention. M. Durand was confined to the Isle de St. Louis; and his only excursion was, as it is *said* in the title, to Galam; but even this journey was performed by proxy. He depends, therefore, on the narratives of other travelers, and adopts some of their errors. He remarks, for instance, that the Gambia divides into two branches, the more northern of which takes the name of Salum. In fact, there is no such river as Salum: the stream that arises from this district on the north of the Gambia, is the source of a small rivulet, which, running southward, falls into the Gambia. A French officer, M. de la Ferriere, traced it to its source, about six or seven leagues from Cahone.

A singular error respects the French and Portuguese establishments in Africa. The author at the Isle of St. Louis might have obtained better information; for even a compiler in a garret could not have made worse blunders. The last French establishment on the western coast of Africa, he observes, is on the Sierra Leone (which, as usual with a Frenchman, he changes to *Serre Lionne*). He certainly meant to confine it to the government of Senegal, for the French have many establishments in the Gulf of Guinea. He adds, that the other parts of the gulf were discovered by the French, but soon abandoned; and afterwards settled on by the Portuguese, who now only retain Loanga, and the little fort of Wydah. There is not, however, an individual Portuguese settlement on either of the rivers: there are some negroes, who call themselves Portuguese, and are perhaps descendants from the former settlers; but they are truly negroes, without a single European trait.

In a commercial view, we find much to blame; but the author seems to write under a bias: some interested motives influence his language, and occasion numerous contradictions. Every writer has condemned France for fixing its establishment on the Isle of Gambia: it is a very small unhealthy island; and, in 1786, the whole of its population amounted to twelve Frenchmen. Though we agree with M. Durand, that the banks of the Sierra Leone are by far preferable for a settlement; yet neither the situation, nor other circumstances, support his opinion of the propriety of establishing powerful colonies, whatever be the nation that chooses to fix a settlement. Little farms might

excite the negroes to imitate them; and were a dépôt established for their harvest, they might, by degrees, be civilised. The inhabitants of the sea coast are already so, in some degree; and the connexion with Europeans has had a sensible effect on their conduct, their character, and their manners.

We shall not dwell any longer on the first volume, which is only a copy of former authors; often an incorrect copy of inaccurate and ill-informed travelers. In the second volume M. Durand speaks more from his own observation; but we cannot trust a man whose views are apparently distorted by commercial interest, and whose office, as director of the Gum Company, limits, very considerably, the information which he would impart.

We shall not enlarge on the difficulty of entering Senegal, nor on the description of the Island of St. Louis, the principal French establishment; we shall return to the subject in a future part of our journal, where our boundaries will be less contracted. The factory (*comptoir*) at the Isle of St. Louis is the general dépôt of all the commerce from each bank of the river. This trade consists in gum, gold, ivory, ostrich feathers, and negroes. M. Durand asserts, that the number of captive negroes does not exceed twelve or fifteen hundred; and that the price is augmented in consequence of the competition, the avarice, and the jealousy, of European traders: yet, even from the French accounts of 1786, the year when M. Durand was at the Isle of St. Louis, the number of negroes exported amounted to two thousand two hundred; and it has been said, with what truth we cannot now ascertain, that the Gum Company, from some private motives, enhanced the price.

M. Durand, when he left France, engaged to penetrate into the interior of Africa, and ascertain the real state of that part of the world. Either his resolution failed, or other engagements prevented his engaging in this expedition. He dispatched, however, M. Rubaud on this journey of discovery; and his instructions were dictated in the true French style of declamation and lofty pretence. M. R. was ordered 'to establish commercial connexions, to unite them more closely; to obtain information respecting the nations which inhabit the internal parts, to penetrate their territory; to discover mines of gold; to continue his journey of observation as far as the Isthmus of Suez; and to return to France by the Mediterranean ports. Such was, in effect,' adds the author, 'the grand plan that I formed. It was, at the same time, subservient to the interests of my country, and of humanity. I carried all the arts of civilisation among a numerous race, debased and condemned to slavery; sunk equally by misery, ignorance, and oppression. I rendered fertile the ground reduced to an absolute sterility, whose prospect saddens the view. I gave to Europe an inexhaustible mine of useful knowledge and riches. I made the attempt; and my first

essays were successful. I can only regret the uncertainty of fortune, which impeded the completion of this splendid enterprise, which, after my departure, was not pursued, and in which the principal agent became the victim of a most unpardonable negligence.' It would have been indeed glorious to have willed, in his counting-house, the spread of happiness and civilisation; to have collected, by a wish, all the gold of Africa. But by whom were all these prospects to be realised? Rubaud was the cook of the factory; and, whatever may have been his talents, he had neither compass, telescope, barometer, nor any other mathematical instrument. He was ordered to regulate his journey by the stars, and the directions of the natives; and his only companion, guide, and protector, was a marabou, a priest respected by the negro nations.

M. Rubaud was another Sebastiani; received with open arms, with acclamations, with distinctions, by the chiefs; and, by all, with hospitality. He traversed the kingdoms of Cayor, Yollof, Manding, Youly, Merine, and Bondo, to the north and north-east of the Gambia, and arrived at Galam, a distance of about one hundred and fifty-five leagues in two hundred and six hours. The Galam chief received himself and his companions with distinction, and announced their arrival to M. Durand with letters full of promises of protection. Immediately all the people of the interior ran, with all the riches of their country—slaves, gum, gold, ivory, &c. M. Rubaud had no objects to exchange, and no fleet to convey them: he was assassinated by his slaves; his house and magazines burnt. Thus ended M. Durand's heroic enterprise, which he styles '*my journey*.'

The subject of the eleventh chapter is singular: its object is to prove, that no commerce can be carried on to the western coast of Africa, but by privileged companies. This seemed to be our author's chief object; and for this his two volumes were seemingly written. But the system here supported is at variance with the principal parts of his former labours. He had fully detailed all the commercial objects which the shores of the Senegal produced, viz., slaves, gold, ivory; medicinal, aromatic, and resinous vegetable productions; woods of every species; and corn in immense quantities: and he now confines his commercial speculations to gums. He points out the commerce of Africa 'as surrounded with natural and moral difficulties which must be overcome;'—'a stupid, savage, and inconstant race, who must be *subdued* and *conciliated*.' Yet his envoy was received 'with eagerness, with distinction;' and the chiefs showed the 'greatest anxiety to be connected with the French, whom they *loved*.' This is the language of Denon and Sebastiani in Egypt: the Egyptians were to be subdued by murder; to be conciliated by massacre; and *then* the French was the nation they loved!! But, to return to the question.

'What will be the consequence,' adds M. Durand, 'if this commerce be carried on by competition? A greater or less number of traders will go to Senegal at the same time, for the same object. They will find neither commercial factories, forts, nor resources.' This did not, however, hinder former traders; nor will it impede future ones. On the contrary, the conduct of the Gum Company was, in 1790, so tyrannical, and excited such general hatred, that the possessors of the acacia forests would not bring the gum to the French traders, but sold it chiefly to our merchants in the neighbourhood. The effects of a competition, or of a privileged company, are now sufficiently understood.

'This competition in Africa,' says M. Durand, 'will be fatal in Europe. The diminution of the price of gum will be its inevitable consequence; because the price of the purchase is not a certain criterion of that of the sale, when the object is in the hands of numerous individuals.' This assertion shows little commercial acumen. Europe will gain, and the traders only lose; but they will lose only the first time, and the whole will soon find its level. *Laissez nous faire*, said the merchants to Colbert, when he asked what he could do for their service—'Let us alone.' And, in fact, every regulation of trade, every attempted encouragement, has been more injurious than profitable. In this instance, after the peace of 1781, when Senegal was restored to France, the expeditions to the western coast of Africa were multiplied to a degree which by no means supported the assertions of our author. He observes, however, that, in a period of twenty-nine years, the Senegal and Guinea companies had only fitted out 54 vessels; while the merchants, in the nine following years, had sent out 324. If this be true, and we have no means of disproving the facts, the question is decided—and it is decided in opposition to privileged companies. If it be true also, as has been asserted, that the tyranny and exactions of the last company had disgusted every African chief, the argument will be stronger.—To this subject, on a future occasion, we shall return, and examine, among the effects of liberty, its influence on the commerce of Africa.

The voyage to Africa is principally the history of the first expeditions of the French to the western coasts of that continent, their commercial establishments, and the ill success of the different attempts of the companies successively employed in directing them. M. Durand describes the various nations which inhabit the coasts and the banks of the rivers; the advantages to be derived from trading with them, and the progress we may expect to make in this commerce, by their civilisation.

Mr. Golbery's narrative we shall, on a future occasion,

examine, as well as the respective merits of the different discordant opinions of these two authors, in pursuit of the same object.

ART. XI.—*Parnasso degl' Italiani viventi.* Pisa.

Parnassus of living Italians. Vols. I—XV. (Continued from Vol. XXXVIII., p. 507.)

WE have already examined the first seven volumes of this collection; and, in entering on the eighth, which contains a part of the select poems of the abbate Aurelio Bertola of Rimini, we again perceive the incongruity of the title with the contents of the work itself. Of these *living* Italian poets, we have formerly observed that Pignotti was *dead* at the time of his being here enumerated; and we have now to offer the same remark with respect to the gentle and delicate (*gentile e delicato*) Bertola. 'Death,' say the editors, 'snatched him away from us in the moment in which he was arranging those of his latest poems with which he meant to honour our Parnassus; and he had already sent us a variety of instructions relative to his compositions, from which we shall regard it as a most scrupulous duty not to make the smallest deviation whatever.' His loss, they assert, ought not to deprive the literary world of the pleasure of beholding a new impression of his poems in this collection. We have no hesitation in replying, that, undoubtedly, it ought not: but such an event, and especially when repeated in a variety of similar instances, ought, at least, to have produced a variation in the title of the work, which, in its present adoption, is incongruous, ridiculous, and absurd. The productions of Bertola extend to not less than three of the volumes before us, comprising vols. viii. ix. and x. Of these, the first is devoted to fables and epigrams; the second, and about half the third, to miscellaneous subjects; and the remainder to a prose *éloge* on the late Solomon Gessner. Of the fables, it is sufficient to observe, that they are written with neatness, if not with novelty; though, in some instances, we have found them original as well as elegant; and, if they do not possess the spirit and playfulness of La Fontaine, they exceed the powers of Pignotti and the rest of M. Bertola's associates. The following possesses sprightliness and felicity of application.

'IL ZEPHIRO E IL FIORE.

'Un Zephiretto lieve

Movea,' &c. Vol. viii., p. 61.

We have not space for the original at full length, and think we shall please the majority of our readers by the ensuing version.

‘THE ZEPHYR AND THE FLOWER.

‘A Zephyr, juvenile and gay,
Stretch’d his light wings the other day,
And to a snow-white flow’ret presses,
With amorous tale and soft caresses.
The snow-white flower his suit receives,
And opes, delighted, all her leaves:
And still she opes, as though to meet
His touch so soft, his breath so sweet.
Each moment each to each draws nigher;
The pulse of love advances higher;
‘Till Zephyr, unrestrain’d at last,
Salutes her with too rude a blast;
And, one by one, beneath his power,
Drops every leaflet from the flower.

‘How then looked Zephyr?—Zephyr quick
Plies his light pinions, cloy’d and sick;
And some new charmer hears his vow.—
Oh, Zephyr! what a wretch art thou!

‘Such the seducer: he his court,
Like Zephyr, proffers but in sport;
While, like the flower, the cheated fair
Repents, too oft, bereft and bare.’

The field of epigram is far less cultivated in Italy than that of fables; and the abbate encounters, therefore, much less risque of rivalry in the former than in the latter. Alamanni and Rolli are the only poets who, till of late, had attained any degree of reputation as epigrammatists: they both followed their powers of original invention; the model of the one being the *Anthologia*, and of the other, *Martial*. Girolamo Pompei, indeed, has since acquired some celebrity, from the terseness and elegance with which he has transposed a variety of epigrams into his own language from the Greek and Latin; and it is with his friend Pompei that the abbate Aurelio seems chiefly desirous of measuring swords, when confining himself to the drudgery of translation. The greater part of his epigrams, however, are the production of his mother-wit alone; and they possess, not infrequently, a spirit and poignancy of which he needs not be ashamed. As a specimen, we take, at random, the following.

‘Mirabili cosa! ridere
Di tutt’ ognor tu sai;
E di te, di cui ridono
Tutti, non ridi mai.’

‘Tis passing strange! that you, who laugh
At every soul you view,
Should laugh not at yourself, though all
Laugh at yourself but you.’

Again :

‘ Se il saper non ti comparte
I tesori e la potenza,
Ti dà più ; t’insegna l’arte
D’esser pago, e farne senza.’

‘ Of wealth and power thou hast not much,
But this thou better know’st than any,—
To grasp whate’er thy hands can touch,
And live—yet never spend a penny.’

Of his facility in translating, we select the ensuing, which is from the *Anthologia*.

‘ In sasso un dì conversa,
Niobe, la vita hai persa :
In sasso oggi scolpita,
Rienperi la vita.’

‘ Chang’d, Niobe, to stone, of yore,
Thy form all life resign’d ;
Sculptur’d in stone, thou, here, once more
Dost life and vigour find.’

Thus, again :

‘ Dicon che il crin tu tinga ; e non è vero :
Il crin che ti comprasti era già nero.’

‘ They say you tinge your hair---but they forget :
Your hair was, when you bought it, black as jet.’

The following is from *Martial* :

‘ Ami solo
I defunti tra i poeti ;
Ben ho duolo,
Che piacerti a me si vieti :
Merti assai, ma poi non merti
Ch’io mi muoja per piacerti.’

This, however, is rather too prolix ; and, the original being at hand, we give it.

‘ Miraris veteres, Vacerra, solos,
Nec laudas nisi mortuos poëtas.
Ignoscas, petimus, Vacerra : tanti
Non est, ut placeam tibi, perire.’

In English thus :

‘ Our old, dead bards are all your care.
To share your praise, we first must rot :
But, on such terms, who will may share—
Excuse me, sir : I’d rather not’

We feel no inclination to pursue our author with any detailed remarks through his miscellaneous subjects, which fill up, as we have already observed, the ninth and half the ensuing volume of this collection; more especially as by far the greater part of them are already before the public, having been printed at Bassano in 1785. They consist of canzoni, canzonette, and other lyrical effusions, sonnets, and elegies; chiefly addressed to his friends upon temporary subjects, yet occasionally bemoaning their decease. In a professed collection of *poems*, we were surprised to meet with his *prose éloge* upon Solomon Gessner occupying full half a volume, and again giving us some authority for questioning the propriety of the title. Gessner, however, was a most worthy man, as well as fascinating poet, and a most intimate acquaintance of the abbate Bertola. It is prefaced by a short dedication to Pindemonte, unsubscribed, but apparently drawn up by the editors; in which, alluding to the sudden decease of the biographer himself, they thus continue: 'Unfortunate man! little did he think, while transcribing the last annotations, and deploring the end of the Theocritus of Zurig, that his own sad presentiments would have been verified so soon. His friends have lost him in the flower of his age; Italy in the zenith of his fame.—You, who have been a witness of the sensibility of his heart, and of the sweetness of his pure spirit; you, the companion of his studies, his rival without envy, his censor without servility; accept these pages, which characterise and express his feelings and talents; these pages, which are proud of the honour of your name: receive the richest tribute which the man of virtue can possibly desire, and which can possibly be offered to the friend of Bertola.'

The editors of this work, however, have some excuse for inserting this long prosaic biography. It was regarded by the writer himself as the most finished of his compositions; and he had repeatedly informed them, that, unless this were inserted in their edition, it was his wish that the rest of his writings might be totally suppress. It is, unquestionably, an elegant and spirited composition, a little overloaded with panegyric, and containing more of prose in the measure than in the matter. It offers many interesting anecdotes of their common pursuits, and the common friends of the deceased and the abbate, and especially of Meister, Hirzel, and Girolamo Pompei, the last of whom died only about two months antecedently to Gessner, and is equally and deservedly celebrated for his classical labours and poetic effusions. We are sorry that our limits will not suffer us to copy any paragraph from this excellent tribute to the memory of a beloved friend; but should the works of Gessner, which have lately been published complete in English, ever reach a second edition, we strongly recommend a translation of the entire biography to be

prefixed to them, instead of the very short and unsatisfactory account with which they are at present introduced.

Vols. xi. and xii. contain the select pieces of Clemente Bondi of Parma; of which the longest are, *La Giornata Villereccia*, 'The Village Day,' in three cantos, a humorous poem, which describes the sports, the gaiety, and convivial fare, that the author was fortunate enough to meet with in an excursion to a hamlet in the vicinity of Bologna; *Le Conversazioni*, 'Conversation-pieces;' and *La Felicità*, 'Happiness,' a nuptial poem in two cantos. Of these, the first and last are composed in stanzas of eight verses, consisting of two tercets and a closing couplet; and the second in hendecasyllabic verso sciolto, or blank verse of eleven syllables, a measure in which our author has indulged himself on several other occasions. The smaller poems consist principally of sonnets, cantatas, canzoni, and Anacreontics. Of these, we have been most pleased with 'The Grotto of Vado,' a lyrical effusion on a vast and fantastic cavern on the banks of a Genevese river, in the neighbourhood of Savona; and a decasyllabic elegy, entitled, 'Il Sepolcro,' on the death of the princess Rozella. These, however, are both too long to be presented as specimens of M. Bondi's abilities on the present occasion, and we shall hence select the following:

'LA LUSINGA.

'Da gran tempo,' &c. Vol. xi., p. 139.

'ENTICEMENT.

'Oft have I said that Death should close
This life of darkness and despair;
But HOPE as oft would interpose,
And say, To-morrow will be fair.
To-morrow came unlike unkind;
Yet HOPE alike refus'd to fly.
Still, still, I see her; nor can can find
A heart to suffer or to die.'

There is, indeed, in many of our author's productions, an air of tender melancholy, which proves that he has not been a stranger to the miseries of his own country, as well as to those of the age in which he lives. In the ensuing sonnet the same sentiment is predominant, and appears to have been wisely improved.

'LA PACE.

'Pace, dono del Ciel, dove o in qual core,' &c.

Vol. xi., p. 71.

For the benefit of our English readers, we must also exert ourselves, to present them with a version of this sonnet, which is addressed to

‘PEACE.’

‘Peace! born of Heaven! O tell me where to attain,
 Mid wretched mortals, thine unsullied rest:—
 Thee, the proud tyrant, mid his golden crest,
 Thee, mid his flock, the shepherd seeks in vain.
 Gold cannot buy thee, nor plum’d honours gain:
 Too vile a price for so rever’d a guest.
 Gay sports thou fliest—and every joy possest,
 Palls, without thee, or changes into pain.
 In crowded cities, or the hermit shade;
 Rove we abroad, or rest at home secure;
 Nor art, nor skill, can give thee to our aid.
 Where may I find thee, then?—Ah! well I know.—
 In Heaven alone thou dwell’st, serene and pure;
 Fool that I was! to seek thee here below.’

Widely different are the feelings and style of his immediate successor in the catalogue of these living Italian poets, Giuseppe Parini of Milan, whose productions occupy the first half of the thirteenth and of the fourteenth volumes of the collection; being thus separated and divided, as we suppose (though we are left to suppose alone, for the editors are silent upon the subject), from the difficulty of their corresponding with persons, who, during the late war, were absent from Italy—a fact which we *know* to have occurred with respect to Bertola and Bondi, and which we *conjecture* to have occurred in the case of Parini. Indeed, those of his works which are here actually presented, are still, in one or two instances, imperfect, and especially in that of the longest of his poems which is offered to our notice, and which, when finished, is avowedly designed to embrace the three different stages (the rise, middle, and close) of the DAY. With this poem his works open. The first part of it is entitled *Il Mattino*, or Morning; the second *Il Mezzogiorno*, or Noon; and the third, which the editors do not appear to have received, *La Sera*, Evening. We have said that Parini exhibits a different set of feelings and flow of spirits from Bondi; and, as we find nothing of peculiar prominence in his poems and poemets themselves, we shall prove our observation, by offering to our readers his introductory address, *Alla Moda*, ‘To Fashion.’

‘Far from these pages be the blear-eyes already blinded by a century; far from them the rheumy nostrils of melancholy old age: here we treat not of the grave concerns of government, of severe laws, or wearisome domestic economy—the miserable musings of hoary hairs. To thee, transcendent goddess, who at this hour guidest with such gentle reins, and governest, our brilliant youth; to thee alone is this little work dedicated

and consecrated. Who is there, at the present moment, that does not honour and revere thee as the first of deities; who, in so short a time, hast undertaken to vanquish squeaking Reason, the pedant Good-sense, and jejune Order, thy determined enemies; and hast loosened this auspicious age from its ancient fetters? May it please thee to receive into thy protection, of which, peradventure, it is not unworthy, this little poem. Mayst thou deposit it on the peaceful altars on which our gentle dames and lovely youths consecrate their morning hours to their own use. Of this alone is it ambitious, and of this alone will it be proud. To be more acceptable to thee, it has thrown off the yoke of servile rhyme, and walks forth freely in blank verse, well knowing that with this thou art peculiarly pleased in the present day. It aspires not to immortality, like other books, too much flattered by their authors, whom thou, abruptly rushing upon, hast buried in oblivion. Since it is born for thee, and consecrated only to thyself, so let it be content to live for this moment alone; since thou, who now exhibitest thyself in one individual shape, wilt soon be metamorphosed, and arise in some still more graceful form. If thou shalt deign to regard this *Morning* with a benignant eye, perhaps *Noon* and *Evening* may follow it; and their author will study so to compose and decorate them, that they may not be less dear to thee than the present attempt.—*Evening*, however, as we have already observed, has not yet *followed* in her legitimate succession; but whether owing to a want of attention to his promise on the part of the enraptured votary, or to a direct prohibition on that of the goddess at whose altar he thus offers up his incense, we have not been able to learn. M. Parini is a sprightly and facetious poet, as our readers may perhaps conceive from this specimen of his manner; but we meet with nothing in his productions that is peculiarly worthy of translation.

The latter part of vol. xiii. is filled up with the poems of Luigi Lamberti of Reggia; and of vol. xiv. by those of Luigi Ceretti of Modena; while vol. xv., the last which has yet reached us, comprises the productions of Dominico Anguillesi of Pisa, and of Onofrio Minzoni of Ferrara. These, however, are all of them but slender contributors, and are seldom possessed of any very prominent merit. With Minzoni's attempts we have been frequently pleased: he seems to have selected *Filicaja* for his model; and hence his effusions are principally confined to religious and devotional subjects. Anguillesi exhibits something of the same pious turn; and appears more at home when thus indulging himself, than when sporting with the looser Loves and the dishevelled Graces. This, however, he has occasionally attempted to do, but with little success. In his 'Ode to the Violet' we were surprised to see his ignorance of pronouncing, or even measuring, the name of the duchess of Devonshire, since her

grace was so long a resident in Italy, and the poet here professes to have the honour of her acquaintance. In the instance we refer to, this ignorance is productive of a most ludicrous effect, by adding sound to the mute and final *e* of the title of *Devonshire*, and thus elongating the word to four syllables. To give full effect to the absurdity of the blunder, we will present our readers with the same rhyme in English as it occurs in the Italian, which is as follows:

‘ Non sai tu che dolce oggetto
Sei di tenero desire
All’ amabil *Devonshire*
D’ Albion pompa ed amor ?’

‘ Know’st thou not that Albion’s pride
Much and long for thee has sigh’d ?
Rise, then, from thy shade so dreary,
Rise to lovely *De-ven-shi-re*.’

Upon the whole, the collection here offered is highly creditable to the modern Muse of Italy; who shows that she still looks with a wishful eye, and lingers with an hesitating foot, on the borders of a country she has more than once pre-eminently blessed with her stated residence.

ART. XII.—*Monumens Antiques, inédits ou nouvellement expliqués.*
Par A. L. Millin, Conservateur des Médailles, &c. Tome I.
6^e Livraison. 4to. Paris.

Ancient Monuments, not before published, or newly explained, &c.
Imported by De Boffe.

M. MILLIN, whose zeal and exertions cannot be enough applauded, with this number completes his first volume. If possible, the assiduity of his researches increases with their progression. We wish, however, that the particular objects of them were sometimes more interesting. For instance, rare and unpublished medals, or inscriptions, would, we conceive, have occupied with advantage some of the pages which have been devoted to vases, whose great similarity of form and ornaments, has, at least in this country, rendered them sufficiently familiar to public observation.

The articles contained in this number, are, 1. A description of a cornelian, with an engraving of *Diana Lockia*; 2. A Greek vase representing Theseus attacking the Amazon Hippolyta, on two plates; 3. The description, with an engraving of the front, of a cinerary urn in marble, from the cabinet of the National Library, inscribed

D. M.
SABIDIA · FE
LICITAS · MA
TRI · BENE ME
RENTI · FECIT

4. A description of a diptych of Areobindus the Great, who refused the empire, which the people, irritated against Anastasius, offered him. Over it is inscribed

FL · AREOB · DAGAL · AREOBINDVS · VL.

that is, *Flavius Areobindus Dagalaif Areobindus vir inlustris*. Areobindus was the son of Dagalaif, consul in 461, and celebrated for his military prowess.

The fifth and last article, which makes the thirtieth in the volume, presents a description of an Egyptian torso, in basalt, given by the first consul to the cabinet of the National Library. Of this monument we are presented with both a front and back view; but the hieroglyphics upon it are represented with so little precision, that not much reliance can be placed upon the engraved forms.

The disquisition on this monument is full of research; but, if it bring not conviction to the inquisitive, it will at least furnish him with materials to extend his inquiries.

The volume closes with *corrections* and *additions*, and tables of the articles, plates, authors, and general matters, comprised in it.

We shall be happy to attend M. Millin in the continuation of his work. Having already hinted at the increased interest which more attention to medals might give, we cannot forbear expressing a wish, as we are convinced it would be a considerable improvement, that a certain portion of each volume might be set apart for a regular course of numismatic discussions.

ART. XIII.—*Beitrag zur chemischen Kenntniss der mineral Körper.* Posen.

Memoirs subservient to the chemical Knowledge of mineral Bodies
By M. H. Klaproth. (Continued from Vol. XXXVIII., p. 545.)

WE shall close our account of this volume by giving an abstract of the most remarkable and important analyses that remain; for we perceive, that the narrowness of our limits, and the attention to variety indispensably necessary in a journal of this kind, forbid us to notice each fossil which has engaged this indefatigable chemist's attention. We trust that we shall, at a future period, complete the whole, in an examination of a translation.

The micemite takes its name from Miemo in Tuscany, where

Dr. Thompson found it in 1791, and called it magnesian spar. It is of the green colour of asparagus; crystallised in flattened, triangular pyramids; of a moderate hardness and weight; rough to the touch. It contains 0.53 of carbonat of lime; 0.42 of carbonat of magnesia; with a very minute proportion of iron mixed with manganese. The near resemblance of its principles with those of the magnesian spar of the Tyrol, leads us to conclude that they are two species of the same genus.

The prismatic magnesian spar was discovered at Gluck-Brunn, in Gotha, in small clefts of cobalt. It is very uncommon; and its crystals are tetraëdral, almost rectangular, of the colour of asparagus; deeper, in many of its varieties, than that of the chrysoberyl, and rarely so clear as the apatite of the Cape of Gates. They break with a glassy splendor, and crack into irregularly angular fragments; are very transparent, of a moderate hardness, and leave a snow-white mark: specific gravity, 2.885.

Some of the crystals of the magnesian spar, calcined in a platina crucible for half an hour, come out entire, but very friable, and wholly opaque. Zones of different colours are observable: the external of an isabella (dull) red, the second of a reddish white, and the centre of a pink brown. They still preserve some splendor, and lose about 0.45 of carbonic acid, though the whole acid is not volatilised. In 100 parts it contains 33 of lime, 47.25 of carbonic acid, 14.5 of magnesia of iron, 2.5 of oxyd of iron; 2.75 lost.

Tabular spar is generally found in a mixture of brown crystallised granite and blue calcareous spar, with which it makes a third ingredient. It is of a milky white; and M. Karsten describes its crystals as hexaëdral. M. Stutz gave it the present appellation, because it breaks in long and somewhat shining plates. M. Stutz found it at Dognaska, in the canal of Temeswaer; and M. Estner at Oravüza. Its analysis shows that it is not a species of tremelite; for it contains 0.50 of flint, 0.43 of lime, with 0.5 of water. The lime is not carbonated.

The natrum of Egypt we have already mentioned, as analysed by M. Berthollet. It is found in lakes, in the deserts of Makaria, in Lower Egypt, not equally pure in every part of the mass. We may repeat the analysis, on account of the following article: in 500 parts it contains 163 of *dry* carbonat of soda, 104 of *dry* sulphat of soda, 75 of *dry* muriat of soda, and 158 of water.

The natrum of Egypt is often found in very hard crystalline masses, which is owing to the proportion of the muriat of soda. It is so hard as even to be employed in building walls. The natrum of Debrezin in Hungary, and Monte Nuovo near Naples, having lost their water of crystallisation, appear, on the contrary, in the form of a powder. The radiated natrum is not

subject to effloresce, though it is formed in the burning soil of Africa; a phænomenon truly singular, which is explained by the following analysis of our industrious author. The description of this fossil we owe to the attention of M. Bagge, the Swedish consul at Tripoli.

This natrum is taken from a place called Trona, of the province of Sukena, two days' journey from Fezzan, at the foot of a mountain. It there forms a crust, at most an inch thick, but often much thinner. It is always crystallised; and its fracture exhibits long agglutinated crystals, parallel, often radiated, resembling gypsum not calcined. Independently of the quantity of trona (for by this name it is distinguished) sent to Egypt and the internal parts of Africa, a thousand quintals arrive annually at Tripoli. It is not at all mixed with muriat of soda; and the mines of that salt are on the shores of the sea, twenty-eight days' journey from Trona, which is situate in the interior parts. The natrum, analysed, formed a crystalline crust, from four to six lines in thickness, composed of vertical laminæ of a foliated and radiated texture. It contains about 0.22 of water of crystallisation, 0.38 of carbonic acid, 0.37 of pure soda, and 0.02 of sulphat of soda. On comparing this analysis with that of artificial carbonat of soda, we find the proportion of the carbonic acid by far greater; indeed, more than double; which appears to be the cause of its not efflorescing. We know, that the combination of the carbonic acid with artificial soda is not at its maximum; and, when a larger portion is combined, it attains the crystalline form, and the other properties of the trona.

'Analysis of the natural muriat of ammonia of Vesuvius.' —After the eruption of this volcano, which occurred in 1794, and continued many weeks, the vapours of the lava, partly condensed in the form of concrete salts, under different forms, were found in the crevices and the hollows of the scorix, when cold. The principal products of this sublimation were the sal ammoniac and the muriat of soda. The former is sometimes pure, sometimes yellowish, and often crystallised in prisms of four sides, somewhat inclined, very brilliant, and very transparent. The muriat of soda almost always forms strata of salt of no regular figure, fibrous in its fracture: it is seldom pure, and often mixed with an oxyd of copper, which tinges it with a green of different intensity, and sprinkled in many places with little shining leaflets of spathic iron. We may certainly consider the sublimed sal ammoniac as the production of the decomposition of water and atmospheric air, in this vast chemical operation of nature. The muriat of soda has a less recondite source: the sea water, which penetrates to the focus of the volcano, contains it; and the part which is decomposed forms the muriat of ammonia. M. Klaproth has found this muriat completely pure, containing only $\frac{1}{100}$ of muriat of soda.

He discovered a little more in one variety, whose crystallisation was less regular. The yellow variety of these crystals have the same form. They have the beautiful colour of topaz, owing to, at most, $\frac{1}{800}$ part of iron. Our author expresses his surprise at not finding the sulphat of ammonia, as the muriat is formed in an atmosphere impregnated with sulphureous vapours.

'Analysis of the sal ammoniac of Bucharía.'—Bucharian Tartary furnishes a natural ammoniacal salt, differing, in its external characters, from that of the lava of Vesuvius; but we are not yet sufficiently informed respecting its origin or its natural history. M. Model first mentioned it, and told us, that many quintals are annually brought to Russia and Siberia; which leads us to presume that it abounds in Bucharía. The idea of its being formed on rocks is supported by finding the salt covering fragments of a clayey schistus, or compacted clay. Among the grains of this salt we sometimes perceived small unconnected fragments of yellow sulphur. M. Karsten, in his tables, calls it conchoidal sal ammoniac. It is of a greyish white, with an unequal surface. It is only slightly brilliant externally, but has a glassy splendor in its fracture, which is perfectly conchoidal. Its fragments are irregularly angular. It varies from semi-transparency to opacity: it bends; is tender and light; of an urinously poignant taste; and contains, in 100 parts, $97\frac{1}{2}$ of muriat of ammoniac, with $2\frac{1}{2}$ of sulphat of ammonia.

The sassolin, which is next analysed, is the natural sedative salt, the acid of borax. It is white, with some spots of an isabella yellow, grouped in stalactites, soft and soapy to the touch, easy to pulverise. M. Hoëfer first pointed out the uncombined boracic acid, which he found in the waters of the lake Cherchiasso, and in those of the lake Castel-Nuovo. Mascagni traced it, in a concrete state, on the banks of the hot spring of Sasso, near Sienna, and, from this circumstance, has called it sassoline. It contains 0.86 of boracic acid, 0.11 of sulphat of manganese, mixed with a little iron, and 0.3 of sulphat of lime.

To this analysis our author has joined that of a grey sandy powder, collected on the lakes, sent to him under the name of loto. He found it contain 0.54 parts of flint, 0.16 of alumine, 0.3 of oxyd of iron, 0.8 of sulphur, 0.5 of sulphat of lime; 0.14 were lost. As the quantity of sulphurated hydrogen was inconsiderable, the parts lost must have been watery.

'An analysis of the salt of Idria with capillary fibres, holotrichum Scopoli.'—This salt is found in the hollow of an argillaceous schistus mixed with the aluminous schistus of the mines of Idria. It is of a silver white, and forms needle-like or capillary crystals sometimes more than two inches long. It was formerly taken for plumose alum, composed of aluminous earth, sulphuric acid, lime, and iron, according to Scopoli; but this

opinion is shown, in the present work, to be unfounded; for these capillary fibres really contain neither alum nor lime, but are a natural combination of a sulphat of magnesia with a very small proportion of sulphat of iron.

‘The plumose alum of Frayenwalde,’ partly formed in the quarries of argillaceous schistus at that place, and particularly by the decomposition of the schistus in free air, is of a white colour, bordering on grey: it is composed of capillary filaments, sometimes incurvated, occasionally united in bundles, either slightly compacted or agglutinated and forming a crust; of a moderate silky whiteness; 100 parts contain 15.25 of alumine, 7.5 of oxydulated iron, and 75 of pot-ash, sulphuric acid, and water of crystallisation.

The analysis of mellite, which we shall next notice, is a very important part of this work. We owe the knowledge of this fossil to the celebrated mineralogist of Freyberg, Werner, who described it about ten years since. It has not, however, been analysed with such accuracy as to have enabled us hitherto to fix its proper place in the mineral systems. M. Klaproth calls it mellite, from the resemblance in its colour to honey.

As this fossil has not yet been described with precision, and is almost unknown in this country, we shall add an account of its external characters.

It is generally of the colour of honey, more or less deep; and sometimes of a straw-colour. The crystals are always octaëdral; but they are seldom entire, and have often a pyramidal form, with four faces more or less distinct. They are seldom of a regular size, but generally small. The surface is commonly uniform and brilliant, sometimes irregular and unequal; but internally the splendor is glassy, the fracture conchoid, and the fragments irregularly angular. The crystals are seldom transparent; more commonly they are semi-transparent; and scarcely translucent, even in the straw-coloured variety. It is tender, fragile, easy to pulverise. Reduced to powder, it is of a greyish yellow: specific gravity, 1.55: found at Arten in Thuringia, but separate, in small quantities, in strata of turf. In the same mine we sometimes find small yellow crystals of native sulphur, which strongly resemble the straw-coloured mellite; so that it is not easy to distinguish them.

Mellite was at first supposed to be a combustible fossil resembling amber; and its external characters seem to confirm the idea: but it is not combustible, and, in flame, only becomes white. M. Gillet Lamont has shown, also, from other properties, that it cannot be amber. Some have supposed it a sulphat of lime, impregnated with petroleum, to which its yellow colour was owing; an opinion probably derived from its becoming white when exposed to heat. It is not, indeed, improbable, as it is so scarce, that it may have been imitated by a

coloured selenite. Mellite has actually been analysed by MM. Lampadius and Abieti, who differ greatly in their results. The first thinks it almost wholly composed of carbon and petroleum; the second finds in it carbon, alumine, and the benzoic acid, with some iron. M. Klaproth concludes, from his experiments, that mellite is composed of alumine and an acid; and, in the dry way, he converted 100 parts of this fossil into 34 inches of carbonic acid gas, 25 of hydrogen gas, 33 grains of an acidulous aromatic water, 2 of aromatic oil, and 9 of pure carbon; the 16 of alumine combined with a little flint.

The acid differs from all other vegetable acids, and is distinguished by the following properties.

The mellitic acid crystallises in fine needles, or in globules composed of the re-union of these needles, or in little hard prisms. It has not, at first, a disposition to crystallise, but seems to acquire it by absorbing oxygen from the atmosphere. The taste is gently sharp, leaving a bitter impression. Put on a warm plate, it decomposes easily, and evaporates in a copious grey smoke, which does not affect the smell: a small quantity of insipid ashes remains, which do not change the colour of either red or blue vegetable tinctures. Neutralised by pot-ash, it crystallises in long groups of prisms; with soda, in cubes, or in triangular tables, separate or grouped; with ammonia, in beautiful prisms of six faces, which soon lose their transparency in the air, and become of a silvery white. When dissolved in lime-water, if a solution of barytes or calcined strontian be *dropped* in, a white precipitate is formed, which is re-dissolved by adding muriatic acid. With the acetite of barytes a similar precipitate occurs, re-dissolved by the nitric acid. No cloud or precipitate is observable on a solution of muriat of barytes; but, some time after, very fine, transparent, needle-like crystals are deposited. This acid produces no change on nitrat of silver; but the precipitate from a solution of nitrat of mercury is very abundant, and disappears by a farther addition of nitric acid. The precipitate from adding it to a solution of nitrat of iron, is also very copious, of an isabella (dun) colour, soluble again by mixing muriatic acid; from adding it to acetite of lead, it is also very abundant, and this precipitate is dissolved by the nitric acid; with acetite of copper, the precipitate is green; but none is observed with muriat of copper. The precipitate from lime-water is dissolved by the nitric acid; but this acid will not convert the mellitic into oxalic acid.

These experiments show that the acid is capable of combining with different earths and metallic oxyds, and that it has a stronger affinity to these than the acetous, and a weaker than the mineral acids. It is composed, as we have seen, of carbon, hydrogen, and oxygen; is decomposed by fire, like other vegetable acids, but differs from them in its properties,

and the proportion of its principles : it is, therefore, a peculiar substance, called, very properly, by M. Klaproth, the mellitic acid.

In what place shall we arrange this fossil, thus allied to the mineral kingdom by its base, and to the vegetable by its acid, and its formation in beds of carbon ? Since coals, whatever be their origin, are considered as fossils, M. Klaproth thinks that the mellite should be arranged with those which have an aluminous base. Its constituent parts are, 0.46 of mellitic acid, 0.16 of alumine, and 0.38 of water of crystallisation.

As our limits will not allow us to be very copious in our account of this volume, we shall merely select two other analyses, on account of some curious chemical facts. The first is an analysis of the muriated lead of Derbyshire. The crystals are cubes of four or six lines, with blunted edges. The decrements on the borders of the crystals occasion many varieties in their external forms. In the blow-pipe, this fossil becomes orange-coloured, and then white by cooling. When the coal to which it adheres is lighted up at the spot where the button is fixed, it bursts, and the muriatic acid escapes in white flowers. It contains, in 100 parts, $85\frac{1}{2}$ of oxyd of lead, and $8\frac{1}{2}$ only of acid. This small proportion (for the artificial muriat contains nearly double that quantity) admits of the addition of about 0.66 of carbonic acid, mixed with a little water.

The green phosphat of lead of Zetiopan is composed of prismatic hexaëdral crystals, terminated by planes perpendicular to the axis, sometimes separate, occasionally grouped. The colour is of different shades of green, or that of straw. The pure crystals have a soft unctuous polish, and are occasionally covered with a very fine ochry powder. The matrix is a white sulphat of barytes; the specific gravity 6.270. It strongly resisted fire, but was at last melted in a wind-furnace; and, by cooling, was crystallised in radii, like sulphur, which it also resembled in colour. It contains, in 100 parts, 78.40 of oxyd of lead, 18.37 of phosphoric acid, with a little muriatic acid and oxyd of iron.

The brown phosphat of lead at Huelgoet in Brittany, and that of Wanloch-head in Scotland, are nearly similar in their contents. That from Hoffgrund, near Friburg in the Brisgau, contains only a very minute proportion of phosphoric acid. The yellow colour arises from the great oxydation of the lead; for, by adding to the powder a solution of the muriat of tin, it becomes white.

ART. XIV.—*Médecine expectante.* Par C. Vitet, ancien Professeur en Médecine. 6 Toms. 8vo. Lyons.

Expectant Medicine. By C. Vitet, formerly Professor of Medicine. 5 Vols., with one of *Materia Medica*.

IN the progress of refinement, medicine becomes proportionally inert and inactive. Enervated constitutions will not admit of violent remedies; and the refinements of luxury are carried, with little discrimination, to the bed-side. Thus the sect of methodists prevailed when Rome was in the zenith of its power; and, in the present period, the practice of medicine has declined in energy as our manners have advanced on the side of voluptuousness. If 'expectant medicine' be not openly professed, it is frequently practised: and the physician, in many instances, looks on, when he should act; observes, when he should interfere. We mean not, indeed, to censure inactivity in all cases: we know it to be often necessary: nor is there any circumstance which requires so much judgement, as to determine when interference should cease; when we must wait for a suitable opportunity of acting, and when nature may be alone confided in. As we lately hinted, in our review of Dr. Heberden's work, age cools our ardour, and the experienced physician is more inclined to expect than to perform.

The remedies of Hippocrates were few, and his caution commendable. For this reason we see him very generally a spectator, and not often opposing the efforts of nature by injudicious activity. Sydenham did not stand still from necessity, but from judgement; Stahl, from theory; modern physicians, from delicacy and complaisance. Yet physicians have often been of the expectant class without being aware of it: when they depended on bezoar, magistery of pearls, elkshoof, &c., they were, at best, doing nothing; and, in modern times, a saline draught, with a few grains of columbo root or magnesia, can scarcely be supposed to produce any energetic effects. It was from reflexions of this nature that Harvey wrote his satire, entitled '*Ars curandi Morbos Expectatione*,' in which he introduces some severe sarcasms on the ancient and modern doctrines respecting fevers, coughs, hectic, asthma, apoplexy, calculus, hysterics, &c., and shows that many diseases of the lighter kind may be cured by expectation. Stahl*, whose practice (in consequence of his principle that the soul superintended the health of the body, and corrected, with consummate skill, every deviation) was always weak and trifling, eagerly seised on the

* We perceive a German translation of the '*Theoria Medica vera*' of Stahl, published at Halle. We know not whether it be more intelligible than Stahl's own language, which no one can understand without considerable labour.

idea suggested by Harvey, and published a volume of notes larger than the original work. There is an ambiguity in his title, which he thought it necessary to explain. To Harvey's title, instead of 'Expectatione,' he added '*cum Expectatione*;' and in 1730 he published the '*Ars sanandi cum Expectatione, opposita Arti curandi nuda Expectatione, Satyra Harveana castigatæ.*' The title is evidently designed to explain the former; for the work is intended only to establish a distinction between the *motus hæmorrhoidalis*, and the *fluxus hæmorrhoidalis*.

While we are considering the title, we are wandering from the work; but we have been led away to subjects at least of curiosity, if not of great utility. The dedication to MM. Gilibert and Petetin, doctors and professors of medicine at Lyons, will explain the author's object.

'Accept, my friends, as a tribute of gratitude, the dedication of Expectant Medicine. This work belongs to you, as much as to myself: it is the fruit of our labours; it is the result of experience and observation. Engaged in discovering the essential character of different species of diseases, in investigating the most simple and suitable treatment for each, you have observed those diseases which nature alone cures, and distinguished them from those species where art favours nature, and those where art alone conquers. You have thus opened a new path to observers, and *expectant* has triumphed at Lyons over *active* medicine. It is true, that, for thirty years, we have been compelled to conquer every obstacle which the jealousy and ignorance of *active* physicians could raise; but victory, and the confidence of your fellow-citizens, are your reward.

'This triumvirate will make an æra in the annals of medicine. Three expectant physicians, ready to repel the attacks of their adversaries, fought with constancy for the progress of their art, without using any other arms than those of experience and observation. From a union so extraordinary, new lights are multiplied; truth has appeared with all its brilliancy; prejudices have vanished; and the present work, in which the diseases best known are arranged in classes, orders, genera, and species, is the result. I have chiefly attended to the description and cure of species, and their different distinctions; because I am fully convinced, that a methodic nosology facilitates the study of medicine and observation; that it compels the practitioner to attend to nature, whether acting or observing; and that it can alone extend the limits of the art of healing.

'Safety, health, and friendship.

VITET.'

The first class is that of fevers; and the orders are, 1. Continued fevers, from three to thirty days: the author should, however, have said forty, as the duration of the first species of the third genus is extended to that period; 2. Slow continued

fevers; 3. Intermittents; 4. Eruptive fevers. The second class contains inflammatory diseases. The first order comprises inflammations of the head; 2. Of the breast; 3. Of the belly; 4. Of the natural parts; 5. Of the integuments; 6. Of the periosteum. The third class is entitled painful diseases; and the three first orders are the same as in class the second: the fourth contains the painful diseases of the spinal marrow, the extremities; and the author should have added the bones, as these constitute the third genus. The fourth class consists of convulsions and spasms, each divided into general and particular. The fifth class comprises the weaknesses: these are, diminutions of muscular force (including rickets and scurvy); loss of motion; diminution and abolition of feelings (and sensations); abolition of sentiment and motion (including gangrene). The sixth class comprises the evacuations. The first order contains *insensible* evacuations. The genera are strangely grouped; and under this order we find marasmus and dryness; and, notwithstanding the title of the order, among the species are marasmus from loss of *blood*, &c. The second order is entitled evacuations of air; and the genera are as singularly discordant as those of the first order. The third is entitled evacuations of solid substances not organised, including caries and softening of the bones! The fourth order contains the evacuation of organised bodies. The fifth, the evacuation of opaque fluids, including ulcers, discharges from the bowels and other organs. The sixth, the evacuation of limpid transparent fluids: but in this order are contained catarrh, mucous discharges from the urethra, and tenesmus, each an evacuation of opaque fluids. The seventh order exhibits the hæmorrhages.

The seventh class are the diseases from retention of fluid or solid matters. The first order are the diseases from fluids contained in *one* cavity; second, retention of matters more or less fluid in many cavities, including the suppressions, dropsy, jaundice, &c.; third, retention of air in one or many cavities; fourth, the retention of matters more or less thick in one or many cavities, including the steatomata, schirrosities, ganglien, and cataract. The fifth order are the excrescences; the sixth, solid retentions; seventh, organised retentions; eighth, deplacement of the bones or hard organised bodies, including luxations and fractures; ninth, deplacement of soft organic parts.

The eighth class contains the diseases of the mind. The first order comprises the errors of the imagination, including the passions and various propensities; the second, the errors of judgement, including lying, hypocrisy, meanness, incivility, insensibility, irresolution, &c. &c.!! third, errors of memory; fourth, errors of judgement and memory.

We cannot enlarge extensively on the faults of this classification. The first part does not greatly merit censure; but the

last is confusion worse confounded. In general, the disorders are too numerous, and repeated in different parts of the work : they are not subordinate to the common titles, and sometimes scarcely connected with them. Varieties are mixed, confusedly, with species ; and changes in the system, which do not rise to disease, often immediately follow the most dangerous maladies.

The diseases are, in general, described with sufficient accuracy : but we meet with no definitions, and with no pointed diagnosis. Each disease, after the description, is considered under the titles of ' terminations,' ' subjects,' ' principles ' (pre-disposing causes), and ' cure.' The synonyms which follow the title are not numerous, chiefly those of Van Swieten's commentaries, with a few others, apparently copied from a catalogue, as the object of the work is sometimes mistaken.

The cure proposed is a strange mixture of ' expectation' and ' activity,' nor always dependent upon either plan as we should suppose it most proper. Leeches are applied in almost every instance. We open the book, without any peculiar object of choice, and shall copy the treatment of inflammatory angina of the trachea, vol. i., p. 305.

' Cure.---1st day. Draw ten or fifteen ounces of blood from the arm : apply, at the same time, twenty-four or thirty-six leeches to the *thighs*; a sinapism round the neck, so as to bring on a smart redness ; a semicupium of warm water ; on coming from which, ten or twelve leeches between the shoulders ; a clyster of the flowers of mallows, in which *two drachms* * of vitriolated tartar are dissolved ; pediluvium, with half a pound of pulverised mustard in the water ; a hog's bladder, filled with warm water, to the feet ; a light decoction of barley, sweetened with honey, for the drink ; emulsion of the seeds of cucurbitate, warm, and sweetened with honey, for gargle and drink.

' 2d day. Apply, in the morning, ten or fifteen leeches to the *thighs* : two hours after the bleeding is stopped, repeat them. In the evening, before the exacerbation, apply three cupping-glasses, with scarifications, *below* the nape of the neck : clysters of the infusion of parietaria, with two drachms of nitre. In other respects as the first day.

' 3d day. Remedies the same as the second, except the bleeding. In place of the sinapism round the throat, a very large blister to the *nape of the neck*. Nature acts here better than art†'---*Truly we think so* : but why, then, so much art ?

* The work is full of press errors, and we are desired not to judge till we have consulted the errata. We concluded, therefore, that, for *drachms*, we should read *ounces* ; but no such correction occurs ; nor is there supposed to be a single error in the whole passage.

† At this period above sixty leeches must have been applied to the thighs : five to the throat would have done real service.

'4th day. The same remedies as on the third. A drachm of camphor, rubbed with the yolk of an egg, will form a liniment for the neck. When suffocation approaches to its extreme degree, rather than let the patient sink, let there be a strong friction of mercurial ointment on the neck and neighbouring parts: finally, bronchotomy, as the last, though a very uncertain, resource.'

Was ever empiricism less discriminate? Was ever an expectant physician more active, with so little real skill? An *active* practitioner would have applied half a dozen leeches to the throat; then put on a blister, and given an active purgative. He might afterwards have become an expectant one; for Nature, with the assistance of Mudge's inhaler, or a similar contrivance, would complete the cure *within* four days. In the *last* extremity, he would not apply mercurial ointment, which, *if useful*, could not act for forty-eight hours, while the disease is often fatal before the fourth day; and, when the remedy is ordered, the last extremity is confessedly approaching.

The last volume has the following title: 'Materia Medica, or a methodic Explanation of Medicines generally employed by the active Physician, seldom by the expectant, and reduced to their real Value: containing the Character of the Medicines, their Virtues, their Preparation, their Administration, and the Species of Diseases in which they are indicated. By MM. Vitet, Father and Son, Physicians.'

The materia medica of our authors is divided into sixteen classes -- Emetics, purgatives, sialagogues, errhines, expectorants, diuretics, sudorifics, emmenagogues, leeches, blisters, caustics, narcotics, demulcents, astringents, nutritives, tonics. In general, this volume is useful in the milder (we mean the more trifling) practice, where barley-water is a cooler, an infusion of marsh-mallows an astringent, and of violets a warm cordial. Emetic tartar is one of 'the scourges of humanity;' and scammony, from its highly deleterious quality, ought to be 'banished from practice.' Celsus is our author's oracle; but Celsus was not himself a practitioner; and, as a theorist, he was a follower of the methodic sect--*Noscitur a socio*.--We apprehend our readers will neither expect nor desire us to enlarge any farther. Some useful tables and indices conclude the work.

RETROSPECT

OF

FOREIGN LITERATURE.

FRANCE.

Manuel des Nourrices, &c. The Manual of Nurses, and of Mothers who suckle their Children. By J. M. L. 8vo.—A little work designed for the nursery; and, in the true spirit of modern quackery, each disease is furnished with its remedy. The whole is in the style of French practice, very busy and very harmless.

Voyage à la Louisiane, &c. A Voyage to Louisiana and the Continent of North America, in the Years 1794 and 1798; containing a historic View of Louisiana, Observations on its Climate and Productions, the Character and Names of its savage Nations. By B. D***. Adorned with a beautiful Map of Louisiana and the adjacent Countries. 8vo. Paris.—Louisiana, wrested from Spain to be sold to America, will add greatly, in the page of history, to the magnanimity and generosity of the first consul. In English courts, it would brand him with the name, and subject him to the punishment, of a swindler. Every account of a distant colony must, however, be interesting, if communicated by an actual observer. Our present author gives us very satisfactory details of the numerous nations of savages in that province, their manners, character, laws, customs, habits, and languages.—Those who were, and may perhaps still be, inclined to speculations in that part of America, will find some satisfactory information in this volume: though the prospect, as usual, is embellished, yet the description of the soil, the productions of Louisiana, and the present state of its commerce, will be found interesting. The historical part contains an account of the wars carried on by the French against the savages, and, occasionally, against the English. The author proposes many expedients to raise the colony to its greatest height of prosperity:—his work contains some valuable remarks on the navigation; the principles of administration, of legislation, and government, proper for the colony; and he combats with a suspicious eagerness the assertion, that colonies are only a source of expense to the mother country.

Mémoires historiques et politiques sur la République de Venise, &c.
 -- *Aperçu des Rapports politiques de la République de Venise, &c.* --
Historical and political Memoirs of the Republic of Venice. Collected,
 in 1792, by Leopold Curti. Revised, corrected, and enriched with
 Notes, by himself. 2 Vols. 8vo. Paris. -- *A short View of the poli-
 tical Relations of Venice, as a Supplement to the 'Historical Memoirs.'*
 By the same Author. 8vo. Hamburg. -- The author, in this
 work, unfolds all the secrets of the ancient government of Ve-
 nice. It was, from the first, a publication of peculiar interest,
 and continues so still, though the former government exists no
 longer. The first part comprises, exclusively, the organisation
 of the Venetian government, and the division of its powers.
 The second treats of the council of ten and the inquisitors
 of state; of the doge and the correctors; of the procurators of
 St. Mark, the censors, the avogadors of the commons, and the
 knights of the golden star; of the magistrates of the interior,
 and of the other offices, exterior and interior; of the ducal
 chancellorship, or the offices of secretary of state and the mi-
 nister; of the clergy, the finances, military forces, population,
 character, education, and national riches.

Précis succinct, &c. *A succinct Abstract of the principal Phæno-
 mena of Galvanism: followed by a Translation of Aldini's Commentary
 on a Memoir of Galvani, respecting the 'Power of Electricity on the
 Motion of the Muscles' (a Work very rare in France, which has not
 been translated); and by an Extract of a Work of Vassali-Eandi, en-
 titled 'Experiments and Observations on the electro-moving Fluid of
 Volta.'* By Cassius, Larcher Daubancourt, and Desaintot, of the
Galvanic Society. 8vo. -- This is a work of some curiosity, as it is
 the first publication of the Galvanic Society at Paris. The au-
 thors, after glancing at the discovery of this new fluid, add the
 history of the great improvement it has received, with the ap-
 plication of Galvanism to the art of healing: but, cautious on
 this last point, they are far from representing Galvanism as a
 universal panacea, and confine its effects, at present, according
 to the experiments of the German philosophers, to the cure of
 diseases of the eyes, palsy, epilepsy, asphyxia, and deafness.
 They announce, as attempts only, its application in cases of
 scrotal herniæ, rheumatism, gout, goitres, and weakness. It
 should seem that physicians have, in general, joined with it
 some very active medicines; so that its power, at present, appears
 only as an auxiliary stimulus. In the account of the principal
 authors on this subject, they are divided into two classes; -- the
 first containing those philosophers who think the Galvanic
 a peculiar fluid; the second, those who consider it as the same
 with the electric. The abstract is terminated by a short notice
 of the work of Vassali-Eandi, which is divided into six sections.
 1. On the materials of the electro-mover; 2. On the conduc-

tors of the fluid; 3. On its effects; 4. A parallel between the electro-mover and electricity; 5. The effects of electricity on the electro-mover; 6. Conjectures on the cause of the phenomena of the electro-mover.

De la Crystallotechnie, &c. On Crystallotechny; or an Essay on the Phenomena of Crystallisation, and on the Means of conducting the Operation, so as to render the Crystals complete; with the Modifications of which each Form is susceptible. By Nicolas le Blanc. 8vo. With three Plates. Paris.—The new processes of M. le Blanc afford a beautiful series of crystals, obtained from different substances found in the bowels of the earth; the relation of which with the crystals afforded by nature must add to the value of mineralogic collections. Our author's attempts on this subject began in 1786; and his Memoirs, in that and the two following years, as well as in 1792, were very favourably received by the former academy.—Their opinion the National Institute confirmed in 1802. The minister of the interior was consequently directed to assist M. le Blanc with the means of continuing his researches on the crystallisation of salts, and of printing his work. The advantages of his attempts are; 1. The numerous assistances which they afford for extending and confirming M. Haüy's theory of crystallisation; 2. The opportunities of enriching collections with complete series of pure crystals, from the most simple to the most complicated figures; 3. The chance of discovering the causes of the same natural body assuming such a variety of crystalline forms. The reason why the minister did not obey the vote of the Institute we know not; but the author expresses his obligations to M. Molard, director of the Conservatory of Arts and Trades.

Histoire géographique, politique, et naturelle, de la Sardaigne. A geographical, political, and natural History of Sardinia. By Dominique-Albert Azuni. 2 Vols. 8vo. Levrault.—M. Azuni published, some years since, an essay on the island of Sardinia, which was favourably received, though somewhat erroneous, from the rapidity with which it was hurried to the press. This essay our author has attempted to correct, and, from that imperfect specimen, to make a complete work. The additions are numerous; and the natural history, which was before very concisely examined, is now greatly extended. His title is changed, because the work is almost wholly new;—a map of Sardinia and the adjacent islands is now for the first time added. The first volume treats of the geography of Sardinia; of the city and cape of Cagliari; of the city and cape of Sassari; the situation of the adjacent islands; the origin of the Sardinian nations; the government of the Carthaginians and Romans; the history of Sardinia, from 1761 to 1720; of the Spanish and Piemontese governments in Sardinia; the pro-

jected reforms, and the present table of commerce—to which the necessary documents are subjoined. The second volume relates exclusively to the natural history. On the whole, we think this a very valuable work, which would be an accession to English literature, if translated.

Histoire abrégée des Révolutions de Commerce, &c. An abridged History of the Revolutions of Commerce, or an historic and descriptive Abstract of the Changes which Commerce has experienced, by Colonies, Conquests, new Discoveries, political Revolutions, &c. By A. M. Chappis. 12mo. Paris.—This little work professes to contain the history of commerce from the earliest periods. The history, in the first volume, descends to the Christian æra: the second volume carries it to our own times. Nothing seems omitted; but, of course, every subject is passed over with a rapidity which leaves no impression. The influence which commercial enterprises had on politics, with the treaties that resulted from them, are also mentioned. This volume certainly teaches nothing new; but it recalls what we know, and may suggest inquiries to be pursued in larger works. As an abstract, too, for early students, it will be useful; for it points out the great epochs which created, aggrandised, or gave a new direction to foreign productions, and established the existence of nations, who undertook long voyages, either for the honour of discovery or the lucrative advantages of a new trade. Commerce, arrived at its highest pitch, has been the thermometer of the powers of a state. As designed for young people, however, the style of this history should have been more correct:—the whole is written very negligently.

Manuel des Pharmaciens, &c. Manual of Pharmacy. By E. T. B. Bouillon le Grange, Professor at the Central Schools, &c. 8vo. Paris.—This author's chemistry has been so well received that we willingly point out its sequel in this pharmaceutic work, especially as we have hardly any production in pharmacy, among ourselves, excuted with even moderate chemical skill and scientific accuracy. We shall probably find, however, the junior Dr. Duncan's work an exception to this assertion; for, as far as we have examined it, we have been greatly pleased with the author's judgement and erudition. It is, in the present state of science, what Dr. Leavi's New Dispensatory was at the æra of its publication—and we can scarcely say more in its favour.

The first part of M. de la Grange's volume contains the common simple medicines; the second, the compositions and the processes; the third, the compositions in which simple medicines only enter—these are either extemporaneous prescriptions or Galenic medicines. The fourth contains the properties of compound medicines; the two last, an alphabetic table to the two first. We know not whether we are fastidious

on this subject, but the work by no means satisfies the idea we had formed of it.

GERMANY.

Über die Sogenannten Seemäuse, oder die hornartigen Fisch-eier, &c. Of the Eggs of the horned Fish commonly called Sea-Mouse; with anatomic and philosophic Observations on the Re-production of Raia and Squali. By W. G. Tilesius. 4to. Leipsic.—This is a very important dissertation, divided into eleven sections. The first contains a list of all the authors who have written on the eggs of fishes, on their origin, and the propagation of raia and squali; with critical remarks on their works. In the second, are some general observations on the genus raia, with the figure and description of a new species discovered on the coasts of Portugal. The third is filled with anatomic and physiologic observations on the same genus; the fourth, with observations on the genus squalus; the fifth and sixth, with anatomic and physiologic observations on the squali. In the seventh, the author treats of the eggs of fishes with hard shells, and of their uses; in the eighth and ninth, of the form, colour, substance, and bulk of the eggs of the squali. The tenth contains chemical experiments on the solubility of these eggs, on their relation to menstrua, and their properties; the eleventh, observations on the copulation and mode of re-production of the two genera mentioned. The volume concludes with an explanation of the figures.

The raia, described in p. 77 to 80, is not to be found in the system of Bloch—though, if we recollect rightly, it occurs in that of La Cépède. In ten individuals, the author has found only one variation of structure: in this single fish, beside the range of needles on the back, there were two also on each side. The description is not, indeed, complete, as the author describes only the upper part of the fish, without noticing the teeth or the sexual organs. He has given it the trivial name of rhomboidal, from its shape; and, added to the distinctive character, he points out three small fins in the tail, and a single range of prickles, recurvated, in the middle of the back, which reach as far as the tail.

With respect to the eggs of fishes, the author gives only the result of his own experiments. He has examined and dissected a female ray, and gives two plates of it. He has seen, in a collection of natural history, the egg of a squalus, with the foetus, and gives a drawing of it. The other plates represent the eggs empty, such as they are found on the shores. The different species of rays, he thinks, lay eggs of different form; and from their figure, size, and colour, the different species may be ascertained. He describes three different species of eggs, ac-

accompanied by their representations, the *R. butis* and *oxyrynchus*, and of the electric ray, or, as he seems rather to suspect, of the new species. The chemical experiments on the solubility of rays' eggs relate to their maceration in fresh and salt water, to their change by heat, their solution in the mineral acids, caustic alkali, essential oils, rectified spirits of wine, &c. The results differ greatly from those obtained by Bohadsch: but the latter author examined the fresh egg; Tilesius, those which were dry and empty. The figures are drawn and engraved by the author.

Untersuchungen über den Ursprung, &c. Inquiries into the Origin and present Organisation of the Universe. By Ch. G. and E. F. L. Marschall de Bieberstein. 8vo. Giessen.—In the first part of this work the authors treat of the celestial bodies and their arrangement, explained from general principles, chiefly mechanic. The second section contains a parallel between the observations made on the structure of the universe, and the theories proposed to illustrate them. The authors properly consider, that, as these objects are anterior to all historic records, and to all experience, these great phænomena can only be explained by means of the primitive forces, viz. attraction and repulsion. We need not follow these explanations minutely.

In the second part, they compare the structure of the universe with the systems of philosophers. The earth is the chief object of their attention; and they find it a mass of ruins, the solid parts of which have been deposited from water. They then speak of the 'origin of the systematic combination of celestial bodies,' following the clue just mentioned, the physico-mechanic principles, and the parallel between observations and hypotheses. In general, their speculations rest on the remarks of the most experienced inquirers; and, what is of more consequence, their authorities are subjoined. We have been much pleased with this work, notwithstanding a few striking errors.

Diatetisches Lexicon, oder theoretisch-praktischer Unterricht über Nahrungs mittel, &c. A Dietetic Dictionary, or theoretic and practical Instructions with Respect to nutritive Substances and their Preparation. By Dr. L. Vogel. 2 Vols. 8vo. Erfurt.—These observations respecting nutritive substances, and other means of preserving health, as well as the regimen to be employed in diseases, are interesting. The order is alphabetic, which is most convenient for occasional consultation. Each disease is considered in a separate article, so that the necessary regimen may be at once perceived; and the work comprises directions for the management of child-bed women, as well as the physical education of children. The whole seems very carefully ex-

plained, without the improper influence of any system: the best works have been apparently consulted; and the style is familiar, and often elegant.—M. Vogel promises a third volume, on the ‘Dietetics of the Mind.’

Astronomisches Jahrbuch, &c. Astronomic Almanack for 1805; with Memoirs, Observations, and Accounts, relative to Astronomy. Published with the Approbation of the Academy of Berlin. By J. E. Bode. We announce this annual volume, not merely as an almanac to fix Easter-Day, to give calculations of eclipses, or the courses of the celestial bodies, though these are circumstances of importance; but on account of the accompanying memoirs, which are often important, though incapable of abridgement. They are thirty-four in number; and many of them relate to the two new planets. The first memoir, by the editor, is designed to show that the movable star (Ceres) is really a planet, long supposed to exist between Mars and Jupiter. The second relates to the re-appearance of Ceres, observed by Olbers; the third, the account of the discovery of another movable star (Pallas). The other memoirs are by the most celebrated astronomers, relating to different astronomic subjects; and we particularly notice the names of Prévôt of Geneva, Mechain of Paris, Nicandre of Stockholm, Wahl of Allstadt, Schubert of Petersburg, Klock of Dantzic, Klügel of Halle, Bode himself, Piazzzi, Schræter, Olbers, Herschell, &c. We may just notice, at this time, the Ephemerides of Vienna, for 1803. Its period is, indeed, passed; but it is of importance on account of the memoirs, particularly some new and very valuable tables of the moon, calculated by Triesnecker, accompanied by new equations of the moon in longitude and latitude, and some astronomic observations made in Bavaria and South America in the last century.

Historische Geographie für Kaufleute, Manufakturisten, und Fabrikanten. Historic Geography for the Use of Merchants, Manufacturers, and Artists. By Ph. J. Karrer. 2 Vols. 8vo. Ausbourg.—The first volume of this work has been some time published; and the whole is now complete. We chiefly notice it to point out various imperfections and inaccuracies. We shall, however, at present confine ourselves to the second volume. The information, in this volume, relates to Italy and its islands, Hungary, Turkey, Portugal, France, Switzerland, the Low Countries, Denmark, Sweden, Prussia, and Poland. The history of the progress of commerce in these countries is only added to a few, as our author's chief object is its present state. The merchant will, undoubtedly, find much useful information on the productions of different kingdoms, and their comparative qualities, as well as on the topography and statistics of each country. Under the article of France, M. Karrer loses sight

of this subject, and gives an account of its various revolutions, from the time of Clovis. The article of Italy should have been more extensive; and that of Portugal might have received many useful additions from Lintz's travels, and Ranque's letters on that kingdom. We are informed, in the last, that a German, about ten years since, discovered a mine of quicksilver about two leagues from Lisbon, on the left bank of the Tagus; that more than thirteen hundred sail of vessels enter this river annually; and that three hundred arrive annually at Oporto; that the importations pay a duty of seven *per cent.*, and the exportations five.

F. H. Weber's Kleine Reisen. Short Excursions. By F. H. Weber. 2 Vols. 8vo. Gotha.—M. Weber's observations on travels, and their authors, are very just; and these Short Excursions, though they cannot boast of novelty, are not without their interest. To the English reader, many parts will be new. The first volume contains a journey from Heilbron to Iena, in September, 1770. It is the author's first journey to the university, at the age of eighteen. We here perceive the young author. The observations are superficial; the opinions decisive: he is full of egotism; and his narrative is truly uninteresting. The second article is a journey from Göttingen to Heilbron, in April, 1774; and the third, a journey in the environs of Heilbron, in 1775, accompanied with topographic observations. The last article is a journey to Lowenstein, in 1789 and 1790, which seems to answer no other purpose than to fill the volume. The best part of the second volume is a journey from Heilbron to the Austrian district between Heidelberg and Schwezingen, and to Manheim, in 1797. We here find a good description of the cabinet of natural history at Manheim, and the Garden of Schwezingen.

Briefe aus der Hauptstadt und dem Innern Frankreich. Letters written from the Capital and the Interior of France. By F. J. L. Meyer. 2 Vols. 8vo. Tübingen.—It is too common for English and German authors, after having ran through France, to publish their observations, without having had time to observe or to reflect. M. Meyer seems, in many instances, to have decided with too much haste. The observations are confined to Paris and Bordeaux, as at these places only did he reside for any considerable period.

Briefe eines Französischen Offiziers, geschrieben im Jahr 1800, &c. Letters of a French Officer; written in the Year 1800, in a Journey through Stiria, Carinthia, Italy, Switzerland, Bavaria, and Salzburg. 8vo. Leipsic.—This officer seems also to have traveled in too great a hurry; but his narrative is interesting, and mixed with some new observations on the manners and customs of

these different countries. He appears to have examined the various objects around him with accuracy; and his details are, seemingly, impartial.

ITALY.

Dinamica animale degli Insetti. Animal Dynamics of Insects. By Andrew Comparetti. 8vo. Padua.—Notwithstanding the title, the motions of insects engage little of the author's attention; and he is still less anxious to calculate the moving or resisting powers, when applied to entomology. His object is to describe the organs of respiration in insects; those of taste, smell, and hearing; of the circulation, particularly the heart, which differs so considerably in structure from the same organ in the higher classes of animals. He afterwards treats of the muscles; their composition, situation, connexion, &c. A great number of experiments, and the consequences of some valuable discoveries, have enabled him to support or correct the opinions of other entomologists, particularly Réaumur, and the authors of this branch of the *Encyclopædia Methodica*. Many of these observations and discoveries can be only appreciated by those to whom entomology is familiar; for the writer, more anxious for the progress of the science than his own credit, gives only the anatomic and microscopic descriptions, leaving others to draw the consequences; rectifying only the errors and inaccuracies of his predecessors. He begins with an examination of the internal parts of the mouth, and explains the mechanism of its motions. The application which he here makes of dynamic principles probably occasioned his choice of a title. From the mouth, he proceeds to the feet, and offers some interesting observations on the progressive motion of insects, and on their wings. Some inquiries respecting the buzzing of insects follow: the antennæ, the tails, the sexual organs, and the seat of taste, smell, and hearing. The work concludes with a chapter entitled 'Considerazioni,' which contains the result of the observations collected in this volume.

Notizie dell' Analisi Chimica delle Acque Termale di Montefalcone, &c. An Account of a Chemical Analysis of the Warm Springs of Montefalcone, &c. By John Antony Vidali. 8vo. Venice.—Many springs have not been examined with the rigour of modern analysis; and we are anxious to attain all the information in our power on this subject. The hot springs of Montefalcone arise from the little mountain of St. Antonio, and form a basin at its foot. They seem to have been known to the ancients, but were again neglected, till 1433, when their credit was re-established by Sig. Nemi; since which time they have been much frequented. From the vicinity to the sea, they have a regular ebb and flow; the difference of height

is estimated by the author at twenty-two inches. Their temperature is at thirty or thirty-two degrees—if of Réaumur's thermometer (which is probable), from about one hundred to one hundred and four degrees of Fahrenheit's; but, a little below the surface, it is four or five degrees lower, not only during the flow, but in the time of ebb. The water is clear; leaves no deposition; is salt to the taste, and hepatic to the smell; without iron or copper. In seventy-five ounces, on evaporation, twenty-eight grains were left, chiefly sea-salt. Some other salts, but in a less proportion, were discovered, with a small quantity of earth.

Q. Orazio Flacco, tradotto in Versi Italiani. Q. Horatius Flaccus, translated into Italian Verse. By Gius. Ottavio Nobili Savelli. 3 Vols. 8vo.—We have not been able to examine this edition with care; but, from a cursory perusal, we think it merits the flattering reception which it has received. It is distinguished by its precision, its sprightly ease, and polished elegance. The first volume contains the Odes; the two last, the Satires, the Epistles, and the Art of Poetry. At the end of the third volume is an index of all the remarkable objects noticed by Horace, respecting either history, mythology, geography, biography, or the manners and customs of the Romans. We observe the first volume of a German translation of Horace is published at Lubeck, which we have not yet seen.

Scelta di Favole Italiane, Spagniole, Alemani, ad Uso di Gioventù. A Selection of Italian, Spanish, and German Fables, for the Use of Youth. 2 Vols. 8vo. Bassano.—A selection of the best apologues and fables in the Italian language. In the beginning are some ancient fables, followed by the best productions of Roberti, Pignotti, Bertola, Passeroni, Rossi, Rilli, Chiappa, &c. The second volume contains many Spanish fables of Yrriarte, translated by Coureil; some fragments of German fables; and some others, in prose, of Italian authors. The last is the beautiful apologue of Cesarotti, entitled, 'La Fenice, ou la Vita Mistica.'

Annali dell' Accademia Italiana. Tom. I. No. 1—3. Annals of the Italian Academy. Tom. I. 8vo. Florence.—The academy is composed of eighty members, of different parts of Italy: forty are ordinary, forty corresponding members; to whom must be added forty foreign members, with a vast number of honorary and free associates. The editor is the abbate Giacomo Socchetti, secretary and professor at Siena. The memoirs are not very numerous, nor very important. Few of the authors have yet gained a name in arms. A singular memoir, for such a collection, is one on the cultivation of flax. One on adhesion and attraction is not without merit; but the most interesting are those on the progress of human understanding, and on literary history.

Serie di Pitture, &c. A Series of Pictures, copied from the celebrated antique Vases called Etruscan, explained, with Illustrations either inedited or already published. Folio. Florence—The plates of this very superb work are engraved by a very able artist, Cluny, who was for many years attached to the cabinet of sir W. Hamilton, at Naples. They are coloured from the originals, and varnished in a manner that adds to their beauty. They are thirteen in number; of which the first seven have appeared in sir W. Hamilton's collection. The others are—8. Antiope recognised by her sons; 9. A Thyasus, or the Orgies of Youth; 10. Chorus of Bacchanals; 11. Three Bacchantes, and two Satyrs; 12. Two Mænades and Sileni, with a Genius; 13. A Youth conquering in the Equestrian Games. The originals of Nos. 8 and 12 are in the collection of Reiner: that of the 13th, belong to a Polish nobleman. The price of each is ten lire; but of the last, fifteen lire. The outlines, with the French and Italian text, are sold at sixteen lire. A *Florence lira* is about 8*d.* and one-third.

La Chimica per le Donne. Chemistry for the Ladies. 2 Vols. 8vo. Venice.—The author has adopted the pleasing work of count Algarotti—Newtonianism for the Ladies—as his model. The first volume contains fifty-nine letters, explaining the principal operations of chemistry, the properties of elementary bodies, of acids, salts, earths, &c. The chemical nomenclature is defended; and the applications of chemistry to all the operations and all the phænomena of nature, pointed out. The foundation of the author's reasoning is the existence of two powerful principles, attraction and affinity, in the mineral world; to which, in the vegetable and animal, he adds that of organisation.

Memorie storiche de Veneti primi et secondi, &c. Historic Memoirs of the original and succeeding Venetians. By Count Giacomo Filiasi. 3 Vols. 8vo. Venice.—The author published, some years since, an essay on the first inhabitants of Venice. The memoirs before us contain the history of Venice on land, and concludes with Venice on the sea—'terrestrial and maritime Venice.' In the earliest ages, he observes, the main land (we presume of Venice) was covered by the sea, and the tops of the mountains only were inhabited, by a savage race from the Alps of Tartary, who came in search of a milder climate. On this supposition, the whole valley, near three hundred Italian leagues in length, and thirty or forty in width, surrounded almost on every side by the Alps and Apennines, was open on the north to the Adriatic Sea, and formed a kind of gulf, or an elongation of that sea.

The author next shows how the main land was altered after the successive retreat of the sea, either by earthquakes, volcanic eruptions, or other causes. He then proposes the follow-

ing questions: Who were the first inhabitants of this country? what were their occupations? and at what period was the Terra Firma of Venice first cultivated? His inquiries lead him to the conclusions, adopted by the best historians, that the first inhabitants of Venice came from Paphlagonia, or the ancient Illyrium; and that a certain similarity of manners prevails between the old Illyrians and the Venetians. The Venetians have, indeed, been always distinguished from the other nations of Italy, by name, a peculiar dialect, and character.

The ancient Greek historians have represented Venice as the richest province in Italy; and have asserted that the Etruscans and the Romans were only opulent, after having conquered the countries between the Alps and the Po.

The principal military roads of the Romans traversed this district; as, the Via Posthumia, by Mantua; that of Cremona, which extended to the Po; and the Via Flaminia, which, in the neighbourhood of Rimini, Bologna, and Modena, took the name of Via Æmilia.

These inquiries are mixed with historic accounts of the state and trade of Mantua, Cremona, Ravenna, Verona, Padua, Vicentia, Aquileia, &c. Other subjects, equally interesting, will not admit of an extract; particularly what relates to the Alps, rivers, lakes, islands, forts, &c. and to the ancient language of Venice.

Odi di Giovanni Rosini. Odes of Giov. Rosini. 8vo. Florence.—The author is known to the public by his *Parnassus of the Italians*. He here publishes five odes of singular desert, viz. *On the Decline of Poetry, On Merit, Friendship, To Amarillis, and On Peace.*

HOLLAND.

Reizen naar de Kaap de Goede Hoop, Ierland, en Noorwegen, &c. Voyage to the Cape of Good Hope, Ireland, and Norway, in the Years 1791 to 1797. By Cornelius de Jong, Captain of the Frigate Scipio. Tom. I. 8vo. Haarlem.—This is one of the most pleasing voyages that we have seen. The author, an old officer in the Dutch marine, addressed the remarks they contain to his friends, without any idea of publication. His manner is highly agreeable, even where the substance wants novelty. He occasionally starts into declamation, and sometimes indulges in poetical quotations: in short, he appears in a negligent undress, as before his most intimate acquaintance.

The first letter is dated from Port Prajo, in the island of St. Jago, Jan. 28, 1792, where he remained till the 1st of February, and offers an interesting account of the political situation of this island (one of the Cape de Verds). He was assured that the court of Lisbon had given orders to lay down these islands geometrically, to determine their situation, and to draw the

most striking prospects. We know not that this plan has been executed. He afterwards staid more than a year at the Cape of Good Hope, where he collected many observations on its philosophic state, its inhabitants, &c. These do not greatly differ from the accounts of former travelers; but the author adds somewhat to our geographic knowledge of this remote part of Africa. In his excursions, he reached Stellenbosch, Franshuk, Paarl, and its environs; and gives a view of the political state of the colony, the manners, customs, diversions, &c. of its inhabitants. Cape Town is described with accuracy, as well as its bays, mountains, gulfs, productions, &c.

On the declaration of war against France, the author was ordered to convoy the vessels of the Dutch East-India company to Europe, and particularly to Ireland. He collected some curious accounts of Cork, of the coasts of Ireland, and its inhabitants. In February, 1794, he returned to Holland; and his next volume will contain his other voyages. We shall notice it on its first appearance.

DENMARK.

Zeittscheift für die Forstwissenschaft. Journal of Forest Science. Published by A. Hartmann and C. P. Lautropp. Vol. I. No. 1. 8vo. Copenhagen.—This very valuable journal cannot be too soon known. The authors propose to collect unpublished memoirs on the science of forests; observations in natural history, chemistry, &c. relative to it; memoirs respecting its legal history, its geography; translations and extracts from larger works; tariffs of the ancient and modern prices of wood in different countries; the forest-laws of different kingdoms; the annual progress of public or private establishments of forests; meteorological observations relative to forests; and an account of new books. The memoirs, hitherto unpublished, are—1. A memoir to assist the history of forestal economy in the country of Wirtemberg; 2. On the projected revision of the forest-laws in the Marche of Brandenburg, by M. de Weddel; 3. On the structure of the flower of pines, by Hartmann; in which he has demonstrated the flowers of the pinus, thuja, and cupressus, very completely.

On the subject of forestal geography, we find an account of the present state and the cultivation of the forests of Russia. Among the 'Extracts' are—A memoir of Hiem, on the height and strength of forest trees; 2. A comparison of the heat of charcoal and turf; from which it appears that the heat of the latter is twice as strong as that of the former. In the miscellaneous articles is the plan of a new forestal institute at Stuttgart, and of that of the society of physicians and philosophers of Suabia.

ALPHABETIC INDEX

TO THE

AUTHORS' NAMES & TITLES OF BOOKS.

-
- | | | | |
|--|---------------|---|----------|
| ACADEMY (royal Irish), Transactions of the, | 132 | Antiquity and advantages of church music, | 474 |
| Accidence, Skeleton of the Latin, | 234 | Apollonius Rhodius translated, | 45 |
| Accum's System of chemistry, | 379 | Appeal of the imprisoned debtor, | 118 |
| Addington (Mr.), Letter to, | 230 | Aquatinter, The complete, | 239 |
| Addisoniana, | 359 | Architecture (marine), History of, | 241, 383 |
| Additions to the Elements of general knowledge, | 359 | Argonautics of Apollonius Rhodius, translated, | 45 |
| Address of country minister on cow-pox, | 120 | Armstrong's fast sermon, | 473 |
| —— to lord Grenville in behalf of inferior beneficed clergy, | 239 | Arthur Mervyn, | 119 |
| —— to ladies of England, | 350 | Asiatic annual register, | 121 |
| —— to people on negotiation with France, and projected invasion, | 349 | Atonement, Plain thoughts on the doctrine of, | 111 |
| —— to people by Crown and Anchor Society, | 110 | Babylon, Warning to, | 232 |
| —— to Richmond volunteers, | 350 | | |
| —— (Friendly) to volunteers of Great Britain, | 352 | BANK NOTES, Investigation of principles, &c. of, | 465 |
| Addresses, Publicola's, | 98 | Bank payments in specie, Thoughts on the restriction of, | 467 |
| Adolphus's history of England, | 198, 274, 431 | Bath influenza, Account of, | 116 |
| Adopted son, | 357 | Bidlake's visitation sermon, | 475 |
| Aikin's translation of Denon's travels, | 74, 292 | Bigland on the resurrection and ascension of Christ, | 353 |
| Air (infected), Treatise on the means of purifying, | 117 | Bigotry (religious), Familiar conversation on, | 474 |
| Alfred's address to ladies of England, | 350 | Bingley's Animal biography, | 172 |
| Ancient English metrical romances, | 179 | Biography, Animal, | 172 |
| —— monuments, | 575 | Blagdon's translation of Denon's travels, | 74, 292 |
| Andrewes's Sermon, | 353 | Bonaparte, a ballad, | 102 |
| Anguis in herba, Reply to, | 358 | ——, or the free-booter, | 348 |
| Animal biography, | 172 | ——, Life of, | 480 |
| Annals of chemistry, | 519 | Brackenbury's paraphrase of Isaiah ix, 1-5, | 230 |
| —— of medicine, | 302 | Breakfasts, Rural, | 117 |
| Annual register, Asiatic, | 121 | Brewer, Complete family, | 240 |
| Answer (Plain) to "Near Observer," | 456 | Bristol influenza, Remarks on, | 116 |
| | | British essayists, | 8 |
| | | —— patriot's catechism, | 99 |

I N D E X

- | | | | |
|--|----------|---|---------|
| British patriot's moral and political creed, | 99 | Country in arms, | 111 |
| Britons, Duty of, | 354 | Courage and union in a time of national danger, | 475 |
| Broomholme priory, | 479 | Cow-pox, Country minister's address on, | 120 |
| Brothers, The three, | 168 | ———— inoculation, Report on the, | 234 |
| Brown's Arthur Mervyn, | 119 | Creed, British patriot's, | 99 |
| Bruce's funeral oration on G. Yeaman, | 231 | Crown and anchor society's address to people, | 110 |
| Brutes, Rational, | 477 | Cursory remarks of near observer, Plain answer to, 456—Observations on, | 456 |
| Bryant on some passages in Scripture, | 143 | | |
| Bulmer's National defence, | 475 | | |
| | | | |
| CABIRI, Dissertation on the mysteries of the, | 361 | DANIEL's seventy weeks, Explanation of, | 92 |
| Cambridge's works, | 270 | Darwin's Temple of nature, | 157 |
| Carey's skeleton of the Latin accident, | 234 | D'Aveyro, | 480 |
| Carr's Stranger in France, | 286 | David's review of Priestley's letter to an antipædobaptist, | 233 |
| Catechism, British patriot's, | 99 | Davidson's sketch of the character of J. Erskine, | 353 |
| Catholic clergy of Ireland, Hints respecting provision for, | 96 | Deaf and Dumb, Method of educating, | 403 |
| Causes of the inefficacy of fasts, | 472 | Debtor, Appeal of the imprisoned, | 118 |
| Caustic (Christopher)'s poetical petition against tractorising trumpery, | 355 | Defence, The national, | 475 |
| Chalmers's British essayists, 8, | 259 | Denmark, Literature of, | 600 |
| Characters (Public) of 1801-2, | 407 | Denon's travels in Egypt, Translations of, | 74, 292 |
| Charnock's history of marine architecture, | 241, 383 | Derbyshire, Mineralogy of, | 337 |
| Chemistry, Annals of, | 519 | Deserted wife, | 357 |
| ———— System of, (Accum's), | 379 | Dialogues on natural, civil, and political law, | 536 |
| ———— (Thomson's), | 52 | Dictionary, Farmer and gardener's, | 360 |
| Clergy (inferior beneficed), Address to lord Grenville in behalf of, | 239 | Discourse in defence of the country, | 355 |
| ————, Thoughts on residence of, | 240 | Dissertation on the mysteries of the Cabiri, | 361 |
| Christian character exemplified, | 360 | Don Raphael, | 235 |
| ———— guide, | 232 | DRAMATIC. | |
| ———— hero, | 354 | Bonaparte, | 348 |
| Christianity, Short and practical account of the principal doctrines of, | 474 | Drum, The warning, | 106 |
| Church music, Antiquity and advantages of, | 474 | Duncans' Annals of medicine, | 302 |
| Comparative view of Huttonian and Neptunian systems of geology, | 420 | Du Perron's Oupnek'-hat, | 481 |
| Complete aquatinter, | 339 | Durand's voyage to Senegal, | 563 |
| ———— family brewer, | 240 | Duration of future punishments and rewards, Essay on, | 112 |
| Consumption of the lungs, Essay on, | 115 | Duties of loving the brotherhood, &c., | 472 |
| Contagion, Discovery of the power of mineral acid vapours to destroy, | 234 | Duty of Britons, | 354 |
| Conversation (Familiar) on religious bigotry, | 474 | Dwyer's Shield of the united kingdom, | 106 |
| Correspondence of Lewis XVI., | 36 | | |
| ———— with reviewers, | 240 | EARTH, Illustrations of Huttonian theory of the, 321—Answer, | 420 |
| Corry's address to the people of Great Britain, | 349 | Eaton on religious bigotry, | 474 |
| Cotton twist, Observations on exportation of, | 237 | Economy (political), Essay on, | 542 |
| | | Edinburgh practice of physic, | 441 |
| | | ———— royal society, Transactions of, | 312 |

INDEX.

- Edinburgh school of medicine, 188
 Edwards on perspective, 66
 Edwin, king of Northumberland, 477
 Egypt, Translations of Denon's travels in, 74, 292
 — Account of Leibnitz's memoir respecting, 96
 — Memoirs on, 492
 — Non-military journal respecting, 415
 Elements of general knowledge, Additions to the, 359
 Enamel painting, Treatise on, 238
 Encyclopædia of vocal humour, 360
 England, History of, 198, 274, 431
 English, Scots, and Irishmen, 105
 — parsing, 477
 Epidemic catarrhal fever at Bath, Account of, 116
 Erestina, 119
 Erskine (John), Sketch of the character of, 358
 Essayists, British, 8, 259
 Essays addressed to young women, 120
 — by students of Fort William college, 308
 Eton accident, Progressive exercises adapted to, 476
 Europe and Great Britain, Vindication of, 230
 Evans's fast sermon, 476
 Evenings at my grandmother's, 117
 — at my great aunt's, 117
 Excellence of the gospel, 252
 Exercises (Progressive) adapted to Eton accident, 476
 Exile, Tales of an, 357
 Expectant medicine, 583
- FABER on the mysteries of the Cabiri, 361
 Falconer on the epidemic catarrhal fever at Bath, 116
 Familiar conversation on religious bigotry, 474
 Family stories, 117
 Farmer and gardener's dictionary, 360
 Fasts, Causes of the inefficacy of, 472
 Febrile diseases, Treatise on, 29
 Filkes's Loyal tribute, 474
 Fishery (Irish), Hints for improvement of, 120
 Fletcher on enamel painting, 238
 Fool of fortune, 236
 Ford's letters on medical subjects, 355
 FOREIGN LITERATURE.
 Denmark, 600
 France, 588
 Germany, 592
 Holland, 599
 Italy, 596
- Fort William college, Essays by students of, 308
 France, Literature of, 588
 — Stranger in, 286
 Fraser's letter to Mr. Abbot, 359
 Frederic Montravers, 357
 French philosophy, 475
 Friendly address to volunteers of Great Britain, 352
 Future state of punishment and rewards, Essay on duration of, 112
- GALVANISM, History of, 531
 Gardiner's Causes of the inefficacy of fasts, 472
 Gentz's answer to Haunterive, Extracts from, 230
 Geography, Pinkerton's, 58
 Geology.—Illustrations of the Huttonian system, 321.—Answer, 420
 Germany, Literature of, 592
 Gessner's works translated, 427
 Giles's English parsing, 477
 Glasse's Sovereign remedy in affliction, 231
 Good effects of united trust in arm of flesh and arm of the Lord, 353
 Graglia's New guide to the Italian language, 476
 Guide, The Christian, 232
 — (New) to the Italian language, 477
 Guyton Morveau on the means of purifying infected air, 117
- HALL's translation of Guyton Morveau on the purification of infected air, 117
 Head in the glass cage, 480
 Herdman on white swelling of the joints, 450
 Hero, The Christian, 354
 Hewlett's Christian hero 354
 Hints for improvement of Irish fishery, 120
 — respecting provision for Irish catholic clergy, 96
 Historical surgery, 1
 History of England, 198, 274, 431
 — of Galvanism, 531
 — of marine architecture, 241
 — of the rebellion in 1745, 86
 Holland, Literature of, 599
 Home truths, 101
 Home's history of the rebellion in 1745, 86
 Hook's Anguis in herba, Reply to, 358
 Howison on paper-money, 465
 Hunt's historical surgery, 1

I N D E X.

- Huttonian theory of the earth, Illustrations of the, 321—Answer, 420
- ILLUSTRATION (Marsh's) of his hypothesis respecting gospels, 330, 394
- Illustrations of the Huttonian theory of the earth, 321—Answer, 420
- Infected air, Treatise on the means of purifying, 117
- Influenza, Nature and cause of, 117
 — at Bath, Account of, 116
 — at Bristol, Remarks on, 116
- Inoculation of cow-pox, Report on, 234
- Institute (French national), Memoirs of the, 501
- Invasion defeated, 351
 —, No danger from, 111
- Investigation of principles, &c. of paper money, 465
- Isaiah's prophecy respecting Messiah, Paraphrase of, 231
- Isocrates on the jurisdiction over Turks' islands, 97
- Italian language, New guide to the, 476
- Italians, Parnassus of living, 568
- Italy, Literature of, 596
- JOHNSTONE's account of the discovery of the power of mineral acid vapours to destroy contagion, 234
- Journal of excursion among Swiss landscapes, 360
 — (Non-military) respecting Egypt, 415
- Joyce's Courage and union, 475
- Juvenal translated, 18
- KEARSLEY's Traveler's guide, 118
- Kendal's translation of Denon's travels, 74, 292
 — (Mrs.)'s essays addressed to young women, 120
- Kentish, Letter to, 113
- Kett's additions to the Elements of general knowledge, 359
- King (Lord) on restriction of bank payments in specie, 467
- Klaproth's memoirs, 576
- Knee-joint, Treatise on morbid affections of the, 461
- LA FONTAINE's Village pastor and his children, 236
- Lake's Excellence of the gospel, 232
- Landaff (Bishop of)'s intended speech, 443
- Lantier's Swiss Tourists, 556
- Lathom's Erestina, 119
- Law (natural, civil, and political), Dialogues on, 536
- Law's sermon, 352
- Leibnitz's memoir respecting Egypt, Account of, 96
- L'Epée's method of educating the deaf and dumb, 403
- Letter from Barbadoes on manumission from slavery, 97
 — to Mr. Abbot, 359
 — to Mr. Addington, 230
 — to J. Kentish, 113
 — to Mr. Wilberforce, &c., 97
- Letters to Mr. Fuller, 114
 — to a universalist, 114
 — (Three) on medical subjects, 355
- Lewis XVI.'s correspondence, 36
- Life of Bonaparte, 480
- Lives of painters, 238
- Lungs, Essay on consumption of the, 115
- Luscombe's discourse in defence of the country, 355
- Luzac's dialogues on natural, civil, and political law, 536
- MARINE architecture, History of, 241, 383
- Marsh's translation of Michaelis, Remarks on, 330
 — illustration of the hypothesis, &c., 330, 394
- Mawe's Mineralogy of Derbyshire, 337
- Mayne's English, Scots, and Irishmen, 105
- Medical subjects, Three letters on, 355
- Medicine, Annals of, 302
 —, Edinburgh school of, 188
 —, Expectant, 588
- Memoirs of the French national institute, 501
 — on Egypt, 492
 — subservient to chemical knowledge of mineral bodies, 576
- Memorial to sovereigns of Europe, &c., 211
- Messiah, Paraphrase of Isaiah's prophecy respecting, 231
- Method of educating the deaf and dumb, 403
- Metrical romances, Ancient English, 179
- Michaelis, Remarks on Marsh's translation of, 330.—Marsh's rejoinder, 330, 394
- Millin's Ancient monuments, 575
- Mind (human), Essays on the powers of the, 192
- Mineral bodies, Memoirs subservient to chemical knowledge of, 576

I N D E X.

- | | | | |
|---------------------------------------|-----|--|-----|
| Mineralogy of Derbyshire, | 337 | Oupnek'-hat, | 481 |
| Minstrelsy of the Scottish border, | 250 | Overton's Duty of Britons, | 354 |
| Mirror, Sacred, | 354 | | |
| Monks, The three, | 235 | PAINTERS, Lives of, | 258 |
| Montjoye's Head in the glass cage, | 480 | Paper money, Investigation of prin- | |
| Monuments, Ancient, | 575 | ciples, &c. of, | 465 |
| Moore on the seventy weeks of Da- | | Parnassus of living Italians, | 568 |
| niel, | 92 | Parsing, English, | 477 |
| —'s Good effects of trust in arm of | | Partridge's Reverence to old age, | 231 |
| flesh and arm of the Lord, | 353 | Pastor (Village) and his children, | 236 |
| Morbid affections of the knee joint, | | Paterson's road-book, | 118 |
| Treatise on, | 461 | Patriot (British)'s catechism, | 99 |
| Music (church), Antiquity and ad- | | — moral and political | |
| vantages of, | 474 | creed, | 99 |
| Mysteries of the Cabiri, Dissertation | | Peart on consumption of the lungs, | |
| on the, | 361 | 115 | |
| | | Pelham's Rational brutes, | 477 |
| NATION, Opinions on the present | | Peregrine, or the fool of fortune, | 236 |
| state of the, | 107 | Perspective, Practical treatise of, | 66 |
| National Defence, | 475 | Petition (Poetical) against tracto- | |
| — institute, Memoirs of the, | | rising trumpery, | 355 |
| 501 | | Philosophy, French, | 475 |
| Newenham's Warning drum, | 106 | Physic, Edinburgh practice of, | 441 |
| Newton's Christian character exem- | | Pickersgill's Three brothers, | 168 |
| plified, | 360 | Pinkerton's geography, | 58 |
| Nisbet's Edinburgh school of medi- | | Pitt (Mr.)'s speech on the war, | 230 |
| cine, | 188 | Plain answer to "Near Observer," | |
| Non-military journal respecting | | 456 | |
| Egypt, | 415 | — thoughts on the doctrine of | |
| Nott on the Bristol influenza, | 116 | atonement, | 111 |
| NOVELS, ROMANCES, &c. | | Playfair's illustrations of the Hutto- | |
| Arthur Mervyn, | 119 | nian theory of the earth, 321.— | |
| D'Aveyro, | 480 | Answer to, | 420 |
| Deserted wife, | 357 | Plumptre's Christian guide, | 232 |
| Don Raphael, | 235 | POETRY, | |
| Edwin, | 477 | Ancient English metrical romances, | |
| Erestina, | 119 | 179 | |
| Family stories, | 117 | Apollonius Rhodius, | 45 |
| Fool of fortune, | 235 | Bonaparte, | 103 |
| Frederic Montravers, | 357 | Broomholme priory, | 479 |
| Head in the glass cage, | 480 | Cambridge's works, | 270 |
| Swiss tourists, | 556 | English, Scots, and Irishmen, | 105 |
| Tales of an exile, | 357 | Imprisoned debtor's appeal, | 118 |
| Thaddeus of Warsaw, | 120 | John and Dame, | 357 |
| Three Brothers, | 168 | Juvenal, | 18 |
| Three monks, | 235 | Minstrelsy of Scottish border, | 357 |
| Village pastor and his children, | 235 | Petition against tractorising trum- | |
| | | pery, | 355 |
| | | Poetry by a mechanic, | 119 |
| OBSERVATIONS on exportation of | | Sayers's poems, | 477 |
| cotton twist, | 237 | Shield of the united kingdom, | 106 |
| — on Near Observer's "Cur- | | Temple of nature, | 157 |
| sory Remarks," | 456 | Thalaba, | 369 |
| — upon some passages in | | Political economy, Essay on, | 542 |
| Scripture, | 143 | Porter (Miss)'s Thaddeus of War- | |
| — on "The question, Why | | saw, | 120 |
| do we go to war?" | 217 | Pownall's memorial to sovereigns of | |
| — on Sir W. Scott's Speech, | 239 | Europe, &c., | 211 |
| Observer (Near)'s "Cursory Re- | | Practical treatise of perspective, | 66 |
| marks," Plain answer to, 456.— | | Practice of physic, Edinburgh, | 441 |
| Observations on, | 456 | Pratt's John and Dame, | 357 |
| Opinions on the present state of the | | Preston's Apollonius Rhodius, | 45 |
| nation, | 107 | Priestley's letter to an antipædobap- | |
| | | tist, Review of, | 233 |

I N D E X.

Progressive exercises, adapted to the Eton accidence,	476	Sayers's poems,	477
Prophetic de LXX hebdomadis explicatio,	92	Scotland, Letter respecting improvement of coasts and western isles of,	359
Public characters of 1801-2,	407	Scott's Minstrelsy of the Scottish border,	250
Publicola's addresses,	98	— (Sir William)'s speech, Observations on,	239
Punishments and rewards, Essay on duration of future,	112	Scripture, Observations upon some passages in,	143
QUESTION of Bahama jurisdiction over Turks' Islands,	97	— history, Compendious view of,	354
—, Why do we go to war?	217	Senegal, Voyage to,	563
217.—Answers to it,	217	SERMON by Andrewes,	353
RATIONAL brutes,	477	Armstrong,	473
Reason why, in answer to Question, Why do we go to war?	217	Bidlake,	475
Rebellion in 1745, History of the,	86	Brackenbury,	231
Rees's short and practical account of the principal doctrines of Christianity,	474	Bruce,	231
Reeve (Clara)'s Edwin,	477	Bulmer,	475
Reflections on the resurrection and ascension of Christ,	353	Evans,	476
Regard due to memory of good men,	231	Filkes,	474
Register, Asiatic annual,	121	Gardiner,	472
Reid on the powers of the human mind,	192	Glasse,	231
Remarks on Marsh's translation of Michaelis,	330	Hewlett,	354
Reply to Hook's Anguis in herba,	358	Joyce,	475
Report concerning navigation of the Thames,	237	Lake,	232
— on the cow-pock inoculation,	234	Law,	352
Residence of clergy, Thoughts on,	240	Luscombe,	355
Resurrection and ascension of Christ, Reflections on,	353	Moore,	353
Retzow's memoirs of the seven years' war,	547	Overton,	354
Reverence to old age,	231	Partridge,	231
Review of Priestley's letter to an antipædobaptist,	233	Skurray,	472
Rhodes's Juvenal,	8	Stillingleet,	474
Richmond volunteers, Address to,	350	Thorp,	352
Ripon's Bonaparte,	348	Wilson,	233
Ritson's ancient English metrical romances,	179	Seven years' war, New historical memoirs on the,	547
Roads, Paterson's description of,	118	Shepard's lives of painters,	238
Romances, Ancient English metrical,	179	Shield of the united kingdom,	106
Rural breakfasts,	117	Short and practical account of the principal doctrines of Christianity,	474
Russell on the morbid affections of the knee joint,	461	Simpson on the doctrine of atonement,	111
SACRED mirror,	354	— on the duration of future punishments and rewards,	112
Sarratt's life of Bonaparte,	480	Skeleton of the Latin accidence,	234
Sarrett's Three monks,	235	Skurray's duties of loving the brotherhood, &c.,	472
Say on political economy,	548	Slavery, Letter from Barbadoes on manumission from,	97
		Slave-trade.—Letter to Mr. Wilberforce,	97
		Smith's sacred mirror,	354
		Songs of wit and whim,	360
		Southey's Thalaba,	369
		Sovereign remedy in affliction,	231
		Specie payments at the bank, Thoughts on the restriction of,	467
		Stillingleet's Antiquity and advantages of church-music,	474
		Stranger in France,	286
		Sturch's letter to J. Kentish,	113

I N D E X.

- Sturges on the residence of the clergy, 240
 Sue's history of Galvanism, 531
 Surgery, Historical, 1
 Swelling (white) of the joints, Dissertations on, 450
 Swiss landscapes, Journal of excursion among, 360
 ——— Tourists, 556
 System of chemistry, Accum's, 379
 ———, Thomson's, 52
- TALES** of an exile, 357
 Tatham's report respecting impediments in navigation of the Thames, 237
 Temple of nature, 157
 Thaddeus of Warsaw, 119
 Thalaba the destroyer, 369
 Thames, Report respecting impediments in navigation of, 237
 Thompson's French philosophy, 475
 Thomson's chemistry, 52
 Thorp's visitation sermon, 352
 Thoughts on residence of clergy, 240
 ——— on the restriction of bank payments in specie, 467
 ——— (Plain) on the doctrine of atonement, 111
 Three brothers, 168
 ——— monks, 235
 Threale's complete family brewer, 240
 Tourists, Swiss, 556
 Tractorising trumpery, Poetical petition against, 355
 Transactions of Edinburgh royal society, 312
 ——— of Royal Irish Academy, 132
 Traveler's entertaining guide, 118
 Truths, Home, 101
 Tuke's view of the agriculture of the North Riding of Yorkshire, 342
 Turks' Islands, Question of Bahama jurisdiction over, 97
- UNIVERSALIST**, Letters to, 114
VAPOURS (Discovery of the power of mineral acid) to destroy contagion, 234
- Vidler's letters to Fuller, 114.—Scrutator's review of controversy between Vidler and Fuller, 114
 View (General) of the agriculture of the North Riding of Yorkshire, 342
 Village pastor and his children, 236
 Vindication of Europe and Great Britain, 230
 Vitet's Expectant medicine, 583
 Volunteers of Great Britain, Friendly address to, 352
 ——— of Richmond, Address to, 350
 Voyage to Senegal, 563
- WAKEFIELD's** address to Richmond volunteers, 350
 Walker's Don Raphael, 235
 War.—Question, Why do we go to war? 217.—Reason why, 217.—Observations on "The Question, Why," &c., 217
 ——— (the seven years'), New historical memoirs on, 347
 Warning to Babylon, 232
 ——— drum, 106
 Warren's address on cow-pox, 120
 Weeks (seventy) of Daniel, Explanation of the, 92
 Whately's hints for improvement of Irish fishery, 120
 White swelling of the joints, Dissertations on, 451
 Wife, The deserted, 357
 Wilberforce, Letter to Mr., 97
 William (Fort) college, Essays by students of, 308
 Williams's Tales of an exile, 357
 ——— (H. Maria)'s Correspondence of Lewis XVI., 36
 Wilson on febrile diseases, 29
 ———'s sermon, 233
 Women (young), Essays addressed to, 120
 Woodfall (Sophia)'s Adopted son, 357
- YORKSHIRE**, Agricultural view of the North Riding of, 342